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THE GENESEE FARMER:

Issued the first of each month, in Rochester, N. Y., by

D. D. T. MOORE, PROPRIETOR.

DANIEL LEE, EDITOR.

P. BARRY, Conductor of the Horticultural Department.

To Correspondents.

COMMUNICATIONS have been received, during the past month, from S. L., Nathaniel Smith, C. N. Bement, J. Mallory, Arator, H., J. M., One who is willing to learn from the experience of others, *, Geo. Vail, Young Joe, J. Carpenter, A. C., Alvin Wilcox, John, A Subscriber.

Correspondents whose communications do not appear in this number, are informed that their favors are on file for publication or notice. We have a large number of articles on hand, and are consequently compelled to defer many of them from month to month in order to give a sufficient amount of seasonable and other matter.

SILLIMAN'S CHEMISTRY.—Few men have an equal opportunity to acquire a critical knowledge of Chemistry with the author of the text book before us. A careful examination of the work enables us to speak advisedly of its merits. For the use of schools we know not its equal. The explanations of chemical phenomena are plain, the illustrations abundant, and the arrangement of questions at the margin of each page greatly facilitates the teaching and study of the text. For sale by ERASTUS DARROW, Bookseller, corner of Main and St. Paul streets, who has a general assortment of Agricultural Books.

Notices of several Books and Periodicals deferred until next month—among others "Cole's American Veterinarian," an excellent work, published by JOHN P. JEWETT & Co., Boston, and C. M. SAXTON, New York.

Hints for September.

THIS is the month for seeding, and its preparation. In the region where the fly has prevailed do not sow too early, and in no case before the 10th. Brine and lime your seed—a process that many object to on account of the labor and trouble, but it is an effectual remedy against smut.

The following process answers every purpose, with little labor. After a thorough winnowing through the mill, put the seed in a heap and sprinkle over it fine salt, about a peck to 10 bushels, and then dash on water from a small basin or cup till the brine shows itself on the floor. Shovel it over two or three times, and leave it over night; add as much slaked lime as will adhere to the kernel, and if not moist enough add more water. It is much sooner done than floating it in a tub of brine, and equally efficacious.

If you sow late, or on soil liable to heave, put more seed to the acre—and if you wish to lay it down as a meadow, and not for a regular rotation of grain, sow your Timothy with the grain in the fall. There is no other certain method, as a dry May or June is fatal to spring seeding with that grass. Timothy is of very little use as a fertilizer, and is a detriment to the wheat crop—and is only to be tolerated, as sown with wheat, for the hay and feed it produces. Clover is the only cheap, natural *pabulum* for wheat; it contains nearly all the elements required to produce it.

See that your fallows are well and perfectly drained. Do not trust alone to the plow; let the hoe and shovel be put in requisition to deepen and open all obstructions.

So much wheat was winter killed the past season that a great quantity of seed will be produced; many crops that we have observed, the grass seed, at ordinary, prices will be worth the most money. In those cases the threshing machine, without the separator, should be used, or most of the seed will be lost.

The kinds of wheat now preferred in this wheat region, are the *Improved White Flint*, *Soule's*, and *Hutchinson*.—A sample of either, compared with the trash that comes from some quarters of the west, is a caution to Grahamites.

The White Turnep should now be thinned out, if sown too thick, leaving the width of a hoe blade between each plant.

If you wish thoroughly to eradicate all weeds from the Garden, now is the time to do it, as all the foul seeds have by this time vegetated—or if they again appear they have not time to ripen.

Bud young trees immediately, and use in all cases well formed and well ripened buds, from large and well ripened wood.

Dietetics.

THE philosophy of Eating is a much neglected, but very useful and interesting study. The legitimate purpose of taking food into the stomach is to supply the brain, spinal marrow, nerves, muscles, bones, lungs, liver, and other organs, with aliment appropriate to each tissue; and furnish suitable fuel to be consumed in the system and keep up a uniform temperature of the body at about ninety-eight degrees. A large portion of the diseases which now so painfully afflict civilized communities, might be prevented by never eating nor drinking too much of any thing, and always giving to the circulating blood its appropriate elements in *due proportion*, to repair the constant waste of every part of the body. Animal life can only be maintained by the consumption of organized matter, which owes its organism to vegetable vitality. If there were no plants on the earth there could be no animals. The former alone are endowed with the power of organizing crude minerals, like salts, water, and air into food for animals. The light and heat given out in burning 100 lbs. of corn, or other organized matter, were imbibed from the light and heat of the Sun, at the time the corn or other plants grew. No vegetable or animal substance, whether consumed in the furnace of an iron locomotive, or in a locomotive man, can emit a particle more of heat than was taken up and rendered latent at the time carbon, nitrogen, and the elements of water were organized in the developement of the germ of some plant. In selecting the flesh of herbiverous animals, and the seeds, fruits, and tubers of plants, for human food, there is room for the exercise of much wisdom in choosing organized matter best adapted to meet the peculiar wants of the brain and nerves, the muscles and bones, as well as the breathing process, which often suffers sadly from some defect in the fuel that should keep the human locomotive in a sound condition and healthy motion. Our daily food should be carefully selected and prepared, with reference to the daily wants of each organ and tissue in the system.—It should never contain too much or too little starch, sugar, butter, or fat, nor too much or too little gluten, albumen, casein, or other substance that abounds in nitrogen, sulphur, and phosphorus. Appetite, the senses of taste and smell, and instinct are worth something as guides in selecting suitable nourishment. But these advantages do not supersede the necessity of cultivated reason, of science, in directing aright the nutrition of the human brain and nerves, which are at once the highest expression of organized matter, and the organs of feeling, thought, and conscience, the most liable to derangement. Weakness of brain and feebleness of intellect, as well as defective digestion, imperfact respiration, and muscular lassitude, often arise from the use of improper food. Judicious exercise, or suitable manual labor, can do much toward imparting both health and strength to the physical man. But neither bodily nor mental toil can transform food which is constitutionally defective, into that which contains all the nutritive elements in due proportion. Physical labor is good for the great purpose that God designed it. It can not, however, perform the function of enlightened reason. For the investigation of the laws of health, and its preservation, that each bone, muscle, nerve, and tissue may have just what it needs, man's intellectual powers must be called into active exercise.

Grind a bushel of wheat, and use for making bread only the very white, superfine flour, and you get little beside the *starch* in the grain, losing most of the muscle and brain forming elements in the "middlings." It is in the latter that the chemist finds most of the gluten, bone earth, sulphates, and chlorides. As the stomachs of all the higher order of animals contain hydrochloric acid in some form, (one of the elements of common salt,) the separation of this in bolting makes the bread of superfine flour likely to weaken digestion and induce costiveness. A little salt may remedy this defect; but what will give to the blood the bone earth, and organized sulphur, phosphorus, and nitrogen, which are indispensable to repair the waste in the bones, muscles, tendons, membranes, nerves, and brain of the system? A very little of the coarse bran may be removed without injury, but the canel should be eaten with the white starch called superfine flour.

In making cheese, nearly all the sugar of milk is lost in the whey. We are aware of the fact that the pigs or cows get this; still we want every house keeper to know that two quarts of new milk made into a baked Indian, rice, or bread pudding, are worth a great deal more as food for man than the milk would be if made into cheese or butter.

If most families would consume a little less butter and fat, and a little more sugar, molasses, or honey, the wants of nature would be better provided for. Be careful never to overload the stomach, nor weaken it by the presence of an indigestible substance. Beware of mellons, green corn, unripe fruit, and too much meat, whether salt or fresh. Neither work too hard nor be guilty of the vice of laziness, under the pretence that you are sick; but study at least two hours each day. Beware of all quacks whether homœopathic, allopathic, Thomsonian, or what not; but trust much to temperance in all things, and daily ablution of the whole body.

BURDOCK leaves will cure a horse of the slavers in five minutes; let him eat about two leaves. I have tried it many times. My horses will always eat them when the slavers are bad.—*Ploughman.*

Thorough Draining.---Irrigation.

The Royal Agricultural Society of England is still urging the importance, and encouraging the practice of deep and thorough draining of all moist lands. Pipes sunk two and a half feet deep were regarded as low enough a few years since; but larger experience has demonstrated the superiority of drains four feet from the surface.—With such a hydrostatic pressure above the open tube, one of two inches in diameter will carry off twice as much water as it would if a foot and a half higher up, or nearer the top of the ground. Few are fully aware of the great benefits that accrue from the removal of all stagnant water, whether above or below the surface of improved land. On all clayey soils, or those that have a hard pan subsoil, draining is found to be useful. If a farmer were able to irrigate every field when too dry, and drain it when too wet, it would add immensely to his chances of always growing most abundant crops. Our hot summer sun and quite common lack of timely rains, render irrigation of far greater importance in this country than in England. There are hundreds of small streams that might be turned from their natural beds at a trifling expense, and made to water and fertilize hundreds of acres. The government of Egypt is now expending some eight or ten millions of dollars in daming the Nile and cutting canals to use water for agricultural purposes. To carry it on to still higher levels, several enormous steam engines are making in England to be used to pump this indispensable liquid to an elevation high enough to water thousands of acres above the high water mark of the Nile.

American agriculturists are in their infancy so far as understanding the advantages of removing all excess of water by draining, and all deficiency by irrigation, is concerned. One half of the land now so poorly managed, if cultivated with all practical skill, and attainable science, would yield a nett profit twice as large as is now obtained. Instead of striving to make every rod of land yield its maximum product, the common effort is to struggle to get the biggest farm in the neighborhood or town. A broad surface is coveted above all things.

Charcoal.—Pounded charcoal, or the refuse of the heap, should be thickly strewed over every place where filth is allowed to accumulate. It absorbs the bad smell, and makes an excellent manure of what otherwise would not only be useless but offensive. It also prevents the larvæ of insects from becoming flies or moths. Pigs like to eat charcoal, and are thought to fatten on it; and in the course of the summer months, I frequently have a bushel or so at a time thrown over the pen. It makes the manure so much more valuable that I find it worth while to buy it for the purpose; and in doing so the pens are never offensive.—*American Agriculturist.*

Analysis of Soils.---Agricultural School.

Dr. Lee—*Dear Sir:*—I am favored with your note of the 9th inst., containing some of your views touching the establisnment of an Agricultural School at Rochester.

You do not over-rate the importance to the agriculturist of having correct analyses of the soil he cultivates, as I can testify from experience. Had my different fields been analyzed for the past three years, and manured with reference to the crops to be grown thereon, supplying instead of stable manure those inorganic substances that were needed, it would have been hundreds if not thousands of dollars in my pocket.

Please to consider me a subscriber to the amount of $100, or $500 should the latter sum be necessary, upon the terms specified in your note, and believe me

Your ob't serv't,

J. W. Bissell.

Rochester, July, 1847.

Mr. Bissell is the owner of a large nursery, a part of which is on land that lacks *lime*. He was not aware of this fact till he got the writer to analyze his soil. Of the mineral elements found in the bark of an apple tree, fifty-one and a half are *pure lime* united to carbonic and other acids. In the heart wood the amount of pure lime is over 36 per cent.; in the sap wood 18.63 per cent. Estimating this alkaline base with its associate acids, and more than half of the ash of this tree is lime.*

If we remember rightly, Mr. Bissell informed us that he had lost some 17,000 small apple trees grafted, choice fruit, on the land we examined. Hence, he truly says, that it would have been hundreds, if not thousands of dollars in his pocket if he had been early informed by critical analyses just what his soil lacked, and his fruit trees must have to flourish in the same. Where lime exists in a soil in a free, available form to the extent of one part in one hundred thousand, we find no difficulty but labor to separate and weigh it.

The following is the result of the analysis of a better sample of Mr. B.'s nursery soil:

Water of absorption,	3.00
Organic matter,	5.94
Alumina,	4.26
Oxide of iron,	3.56
Silica,	79.00
Lime,	1.50
Carbonic acid,	.44
Sulphuric acid,	.27
Chlorine,	.19
Phosphoric acid combined with alumina, iron, and lime,	.17
Magnesia,	.32
Potash and Soda,	traces.
Loss,	1.33
	100.00

We thank Mr. Bissell for his good opinion

* See American Journal of Agriculture, and Science, by Dr. Emmons, Albany, for April.

and the generous offer to give from one to five hundred dollars toward establishing an Agricultural School. At first sight, there would seem to be little difficulty in raising $6,000 to purchase 100 acres of good land, as a foundation for such an institution. One half of our subscribers giving a dollar a piece, or 600 of them contributing ten dollars each, would secure the object.—If a farm was purchased and held by trustees for a public institution, we have good reason to believe that the Legislature would give $6,000 more to erect suitable buildings and place the school on a permanent basis. But they would hardly be justified to grant public funds to erect buildings on any man's private property; nor will individuals be likely to give money for such purpose. But the advantages of uniting the study of analytical chemistry and other sciences with practical agriculture are not appreciated. The popular mind seems not to grasp the immense benefits of giving to 100 young men the use of one acre each, to cultivate under judicious instruction at school, and thus aid them in paying for their board and tuition, by having all that their best skill can produce, while learning both the *science* and *art* of agriculture. Men will not believe that any improvement in education on the common collegiate system adopted more than a century ago, is attainable. We have long contended that an important improvement in the education of farmers and mechanics is entirely practical—but what can one man alone do in opposition to popular prejudice, without capital sufficient to found an institution? We have had no difficulty in getting pupils. The only obstacle has been to get land and suitable buildings for boarding, lodging, rooms for study, recitation, museum, cabinet and laboratory. These necessary conveniences we never had. Nor can they be hired at any reasonable rate.

The time will come when the study of the natural sciences that have a direct bearing on rural affairs, will be popular in this state. They will be taught in all our academies, colleges, and high schools, as well as at institutions established on purpose to connect their investigation with the art of tillage, fruit culture, &c. But, before academies can teach analytical chemistry in its application to agriculture, their teachers must obviously go into some Laboratory and learn *the trade*. And where can a Laboratory to teach *practically* agricultural chemistry be so cheaply maintained as on a good farm where students can work three or four hours a day at some healthful rural labor, and thus pay a portion of their expenses? Who will deny that industry and economy are important lessons to be taught to boys and young men? We are right in this matter, but shall not pursue the subject.

DON'T forget to attend your County Fair, and become a competitor for the premiums.

Salt for Plum Trees.

JUDGE CHEEVER has called on us to say that he had lost three plum trees in consequence of putting salt round them. The trees were from two to three inches in diameter, and he used two quarts of salt to each. He was induced to apply the salt in consequence of having seen it recommended as a remedy for certain diseases in the plum tree, and as a promotive, also, of their growth and thrift. As to the quantity, he *thought* he had seen it advised in the *Cultivator*.—In this we think he must have been mistaken, as we can find nothing of the kind. In the *Horticulturist* for December, is a communication from S. A. SHURTLEFF, M. D., of Brookline, near Boston, in which he states that in the winter of 1839-'40, he gave each of his plum trees a "dressing of about two quarts of salt." He was careful, however, not to put it nearer than a foot to the body of the tree.—The salt was that which had been used for pork, and he cautioned the gardner not to use the brine; but he, notwithstanding, did use about a gallon of it round one tree, which killed it. Dr. S. states that he used salt in the same way the next season, and, as he thinks, with beneficial results, so much so that he is "fully convinced that it is, if properly and judiciously used, a sure preventive of both the fungus [*black knot* or *wart*,] and the curculio." We should be glad to hear from others who have tried salt for plum trees, and hope results will be furnished for the benefit of the public. It is in this way only that we can ascertain with certainty the specific operation of any substance.—*Albany Cultivator.*

WE beg to assure our friend the editor of the Cultivator, that all "specifics" are extremely dangerous, whether administered to man, his domestic animals, or cultivated plants and trees.—A "specific," as salt for plums and quinces, a nostrum, and quackery are nearly synonymous terms. Certainly, all are not quacks that recommend "specifics," as Mr. DOWNING does iron for yellows in peach trees, and as another gentleman does common salt for quinces, in the August number of the Horticulturist, whom its editor endorses. We are anxious, as a matter of public good, that the conductors of the Albany agricultural and horticultural journals should take true scientific ground in regard to the feeding of all living things on the farm, whether animal or vegetable. Common salt is very useful to sheep and quince trees in very small doses; but salt alone will make poor mutton, wool, quinces, or plums. Equal care, equal study should be constantly given to supply every other constituent of the animal, or vegetable, as well as the chlorine and sodium of salt,—as well as iron to peach trees afflicted with the weakness called "yellows."

We repeat the remark that, all "specifics" are dangerous remedies. Had Judge CHEEVER been told that common salt formed less than the *twentieth part* of the small quantity of ash or minerals in a healthy plum tree, he would have been more cautious how he used this mineral for the manufacture of the wood and fruit of the trees, to which it was fatally applied. Twenty-five years study and experience have taught us the proneness of the popular mind to adopt a system of empiricism in the treatment of all diseases. The splendid fortunes made by the dealers in nostrums or specifics furnish proof positive that the people really love humbug. For

the honor of rural science, we hope neither the love of money nor of popularity will betray our Albany contemporaries, unconsciously, into the ranks of those that foster and profit by the follies of the age. It is so much easier and pleasanter to sail with the current than to grasp the laboring oar and roe with might and main up stream, for no other compensation than the consciousness of doing good, that not one in ten thousand is willing to forsake the former and adopt the latter course.

Hessian Fly—(*Cecidomyia destructor.*)

Great complaint has been made this season of the ravages of this well known insect. As the fly lives only some ten or fifteen days during the last weeks in September or the first in October, if no wheat was up, and prepared as a nidus wherein to deposit its eggs, very few, if any, Hessian flies would be found in the spring. Until farmers shall come to some understanding, and make a common and simultaneous effort to destroy this insect, it will continue to increase. Sowing a land in a field *early*, to furnish young plants for the fly to work on, and then bury with the plow in the earth, both the wheat and the larvæ of the fly, will destroy countless millions of them.

Late seeding is indispensable unless the wheat grower desires to propagate more insects than grain. No wheat should be sown before the 20th of September. One man may raise flies enough on a 20 acre field, sown in the first week of September, to destroy half the grain in a whole township the spring and summer following.—We have been surprised at the indifference with which many farmers regard the increase of insects injurious to their field and garden crops.—The annual loss to the agricultural interest from this source alone is many millions.

The man that raises a large crop of Canada thistles, or of Hessian flies, injures a whole neighborhood by their spreading, as well as himself.

Plowing only once for Wheat.

Many good farmers are adopting the practice of plowing both stubble and pasture lands only once before seeding with wheat. The after culture is performed with the common, or the wheeled cultivator. Mr. C. H. Randall, of Portage, Livingston county, put in fifty acres last autumn with once plowing, which has turned out equal to any in the town at the recent harvest. He plowed *twelve inches* deep with a stout four horse team in the first instance.

Deep and fine plowing (by fineness we mean not running too far to land,) are giving larger crops with less labor than were raised three or four years ago. Every man should lime his wheat before he sows it; and instead of wetting the seed with simple water, it is better to use a strong brine of common salt. Those that believe in the doctrine that it always takes something from the soil to make 30 bushels of good wheat grow on an acre, will do well to try the experiment of applying 10 bushels of unleached ashes, a like quantity of slaked lime, 3 bushels of salt, 1 of gypsum, and 2 of burnt bones, to an acre of this grain. The ashes, lime, salt, gypsum, and bones, will contain all the earthy elements found in a good crop of wheat. Any time before snow goes off will answer to scatter the compost over the field. Some prefer to apply the ashes, lime, &c., at the time of seeding, covering all with the harrow, or cultivator.

Seeding with Timothy after Barley.

Mr. Editor:—Last year I sowed a piece of ground that I was calculating to lay down for meadows, part with spring wheat and the remainder with barley, and seeded the same with clean timothy seed. This spring I began to notice that the grass on the barley stubble appeared to be all timothy—while that on the wheat ground was a mixture of timothy, small clover, and red top. When the grass came to maturity, another striking difference became apparent—the timothy on the barley ground grew thriftily, turning out a good swath and all headed out—while on the wheat stubble it was little dwarfish stuff, very little of it heading out. Indeed the difference was so apparent that one would have supposed there must have been a difference in the seed, which was not the case. I think it could not have been mere accidental, at any rate I have come to the conclusion that by seeding with timothy after barley we can again raise it and make it profitable. I submit the above statement to your consideration, and if you think it worthy of notice, you will oblige a subscriber and perhaps benefit others by giving it a place in your columns, with your opinion upon the same. Young Joe.

Groton, N. Y., August, 1847.

Remarks.—We are always glad to receive short communications giving new facts on rural subjects. Barley exhausts the soil of the most important elements in the formation of perfect timothy plants less than wheat. Hence this grass will head out and do much better after the former than the latter crop. Return to the land where the wheat grew, all the straw in manure, and as much night soil as the wheat would make, and timothy will grow most luxuriantly. Be careful not to let any of the fertilizers that accrue from the consumption of the barley and timothy be wasted. And never forget that ashes, lime, gypsum, salt, and burnt bones well pulverized will make either timothy, clover, or wheat grow almost anywhere if judiciously applied.

Keep farm tools under shelter when not in use.

Blight in Timothy.

Mr. Editor :—Within a few years past the farmers of Central New York have observed a blight in their meadows, particularly those of Timothy (*Phleum pratens,*) which has during the past season become very destructive, particularly in the counties of Otsego, Madison, Chenango, Cortland, Onondaga, and some others, I believe, and is becoming truly alarming, as it threatens to work great mischief to this highly valued grass. Having my attention called to this, I set myself about ascertaining the *cause* of this blight. On examination, the straw was found to be decayed just above the joint, sometimes the upper one and sometimes lower down. By the naked eye no cause of this decay was perceptible; but by placing the straw under a good compound microscope a little insect magnified to the size of a honey bee made its appearance, and seemed so much at home that I did not doubt but the death of the straw was the result of his depradations.

The animal, when you know where to look for him, may be seen by the naked eye, of a whitish yellow and about as large as a grain of Indian meal. When magnified, it is a perfectly developed insect without wings, having six legs, with scattering hairs on its body, and except its color, which is a light yellow, resembles a bee with its wings removed. It is easily injured by handling and therefore needs care in searching for it.

The most natural conclusion concerning its origin, is, to my mind, that it hatched from an egg dropped down between the leaves before heading, and as the grass grew and headed, it remained between the stalk and leaf, where it in due time hatched and commenced its work of destruction. In some meadows it hatches and begins to work (for it must eat *something*) so early that the grass does not head at all. This was the case in some parts of the meadows of A. N. Annass, Esq., of De Ruyter, Madison Co.

The insect, to be found, must be looked for as soon as the head begins to turn white. But your next inquiry is, how can it be prevented? This question I cannot answer satisfactorily to myself; yet if it is produced as I have supposed, its ravages might be somewhat mitigated by feeding off the grass just after the egg is deposited, if this time could be ascertained. It might be well to sow clover instead of timothy, and then, if my conclusion is true, no danger of blight from this cause need be feared. I hope that future observation will put this matter beyond a doubt, and if possible devise a plan for preventing the evil.

Gurdon Evans,

De Ruyter, Aug. 5, 1847.

The wisest man may occasionally do a weak thing—the most honest a wrong thing—and the worst of men will sometimes do a good thing.

Hydraulics for Farmers.

BY C. N. BEMENT.

NUMBER II.

Montgolfier's Ram.—To Montgolfier, of France, we are indebted for the discovery, or rather the improvement of this useful machine—hence its name, *Montgolfier's Ram.*

The *belier hydraulique* of Montgolfier was invented in 1796. Although it is on the principle of Whitehurst's machine, its invention is believed to have been entirely independent of the latter. But if it were even admitted that Montgolfier was acquainted with what Whitehurst has done, still he has by his improvement, made the ram entirely his own. He found it a comparatively useless device, and he rendered it one of the most efficient. It was neglected or forgotten, and he not only revived it, but gave it a permanent place among hydraulic machines, and actually made it the most interesting of them all.

The device by which Montgolfier made the ram self-acting, is one of the neatest imaginable. It is unique. There never was any thing like it in practical hydraulics, or in the whole range of the arts; and its simplicity is equal to its novelty and useful effects. Perhaps it may be said that he only added a valve to Whitehurst's machine. Be it so; but that simple valve instantly changed, as by magic, the whole character of the apparatus.

Montgolfier's great improvement, which made the machine self-acting, was to substitute an outlet valve, shutting upwards in the place of the cock used by Whitehurst, which valve was weighted so as just to open when the water in the main pipe was in a state of rest. But the moment the outlet valve was opened by the weight upon it, the water then rushed out acquired a power in addition to its gravity—*the power of its momentum*—which was sufficient to close the outlet valve, when the same effect was produced that was produced by the shutting of the cock, and a jet of water was thrown upwards into the smaller pipe, which may be called the "raising main." The water in the main pipe was thus brought to a state of rest, when the weight on the outlet valve was again sufficient to open it, and the water rushing out of it created again the *momentum* necessary to close it, when a further supply was forced into the raising main and so the outlet valve kept constantly opening and shutting, or pulsating, as it may be termed, and a regular stream was made to pass up the raising main. An air-chamber was attached to the last, to produce an uniform flow of water, similar to that used in a common forcing pump. But the weight on the outlet valve was an imperfect contrivance, after all; because if the head of the water varied, the weight required to be varied also; and so long as the weight was the only method of making the ram self-acting,

the machine did not get into general use, being found oftener on the shelves of physiological cabinets than on the premises of the farmer. The late improvements of using springs and screws does away with the weights, and makes the hydraulic ram as nearly perfect as any other machine for the same purpose. A small vacuum valve supplies to the air chamber, as well as to the air vessel, which makes the flow from the raising main uniform, enough air to compensate for that which the water absorbs, besides aiding the opening of the outlet or escape valve, by the partial vacuum consequent on the rebound or reaction.

APPARATUS FOR RAISING WATER.—No. 2.

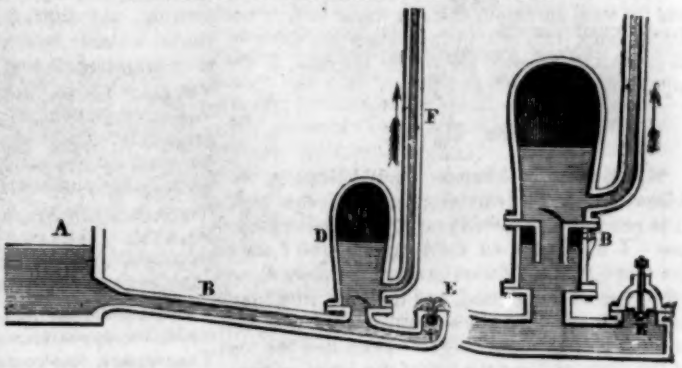


Fig. 4.) *Montgolfier's Ram.* (Fig. 3.)

Montgolfier positively denied having borrowed the idea from any one. He claimed the invention as wholly his own, and there is no reason whatever to question his veracity. The same discoveries have often been and still are made in the same and distant countries, independently of each other. It is a common occurrence, and from the constitution of the human mind, will always be one.

A patent was taken out in England, for self-acting rams, in 1797, by Mr. Boulton, the partner of Watt; and as no reference was made in the specification to Montgolfier, many persons imagined them to be of English origin—a circumstance that elicited some remarks from Montgolfier. The patent was granted to "Matthew Boulton, for *his* invention of improved apparatus and methods for raising water."

For the information of those unacquainted with the operation of the hydraulic ram, it may here be well to sketch briefly its operation.

Explanation.—The head or motive column descends from a spring or brook A, through the pipe B, near the end of which an air chamber D, and raising main F, are attached to it, as shown in the representation. At the extreme end of B, the orifice is opened and closed by a valve E, instead of the cock in Whitehurst's machine before described. This valve opens downwards, and may either be a spherical one, as in fig. 4, or a common spindle one, as in fig. 3. It is the play of this valve that renders the machine self-acting. To accomplish this, the valve is made of, or loaded with such a weight, or adjustment of the spring, as just to open when the water in B is at rest; then as in shutting the cock of Whitehurst's machine, a portion of the water will enter and rise in F, the valve in the air chamber preventing its return. Meantime the water in B has been brought to rest, and relieved for a moment of the pressure and rush of water, the pressure is insufficient to sustain the weight of the valve E, which drops, and re-opens the outlet hole at E, when the current is again put in motion, and acquires force enough to close the valve E, when another portion of the water is again forced into the air vessel C and pipe F; and thus the operation is repeated, as long as the spring or brook affords a sufficient supply, and the apparatus remains in order. This process, or pulsation, like the click of a clock, continues until accident or wear stops the working of the valves. The valves make from twenty-five to sixty strokes per minute. The machine is set in motion by pressing down the valve E, fig. 3.

The surface of water in the spring or source, should always be kept at the same elevation, so that its pressure against the valve E may always be uniform; otherwise the weight of E would have to be adjusted, as the surface of the spring rose and fell.

As the ascending column of water communicates with the air in the reservoir D, this would soon be exhausted, if a fresh supply or portion of the air were not introduced at each stroke of the ram. Thus when the flow of the water through B is suddenly stopped by valve E, a partial vacuum is produced immediately below the air chamber, by the recoil of the water, at which instant the small valve B, in fig. 3, opens, and a portion of air enters, and supplies that which the water absorbs. In small rams, a sufficient supply is found to enter at the valve E.

Air-vessels are indispensable to the permanent operation of these machines. Without them the pipes would soon be ruptured by the violent concussion consequent on the sudden stoppage of the current of the motive column. The air being elastic, breaks the force of the blows.

This beautiful machine may be adapted to numerous locations in the country. When the perpendicular from A to the valve E, is but a few feet, and the water is required to be raised to a considerable height through F, then the

length of the driving pipe B must be increased, and to such an extent that the water in it is not forced back into the spring, when the valve in E closes, which will always be the case, if the pipe B is not of sufficient length.

Fence Making.

MR. EDITOR :—I began to build fence on the following plan 17 years ago, and it answers well. It is generally approved and rapidly getting into use. I first stake out the ground where I want the fence built ; then set or drive my posts about 18 inches in the ground, and then roll in all my big stones and place them so that they will not be over about two feet high. Then line the top of the posts and get the top of the fence as near level as the ground will admit, not over 4½ feet in height. I usually put on three boards, about six, seven, or eight inches wide, beginning at the top with the narrowest and put them about seven and five inches apart. All that remains to be done is to fill up under the boards with smaller sized stones, and banking the fence up to the boards with dirt. This should be well seeded with grass seed. Boards may be used 14 feet long, with one post in the middle ; or the boards may be 16 feet and two posts in the middle. When the posts are well fastened in this way, I do not think capping pays the cost.

Yours, NATH'L SMITH.

Gorham, July, 1847.

Improvement in Hemp-Brakes.

[WE copy the following description and illustrations of an improved Hemp Brake from the "Farmers Library and Monthly Journal of Agriculture." It a matter which will interest, and perhaps benefit, many of our readers in the south and west.]

JOHN S. SKINNER, ESQ.—*Dear Sir:*—I send you the description and drawings of a Hemp-Gin, invented and recently patented by my brother, FRANKLIN P. HOLCOMB, under the following circumstances : My brother, who is a civil engineer by profession, but possessing fine mechanical talents, was stopping with me at my farm, when I happened one day to be reading, from the Farmer's Encyclopædia, what Mr. CLAY says in an article he furnished to that work on the subject of Hemp-Machines, which is to the effect that no machine had ever been invented, and he feared none ever would be, to answer as a substitute for the hand-brake. I told my brother that he owed it to the fact of his having been *a farmer's boy* to supply, if possible, this great desideratum to the hemp-growing interest ; and also expressed the opinion that we might probably grow hemp here to advantage, if the breaking and scutching could be done by machinery.

He finally went to work at it, and I sowed a small quantity of hemp, which we water-rotted. This we got out with the machine. Still he did not think it perfect or right, and went on improving, and altering, and experimenting, for almost another twelvemonth ; and meantime I grew a second crop of hemp for him. This we also got out with the machine, and had a portion of it manufactured into rope. And, finally, the great difficulty that had troubled him so much—the waste in the scutching—was overcome, and we had the satisfaction of seeing this simple little machine break and scutch, with the least possible waste, at the rate of about 1,000 lbs. of clean, merchantable hemp per day—doing the work of some twelve or fourteen men.

But meantime Mr. BILLING'S machine had made its appearance ; and our friend Gen. TALLMADGE had commended it so highly in his Address before the American Institute, that my brother, supposing the final object had been attained, and never having entertained any pecuniary views in connection with it, proposed doing nothing farther with his machine. But he subsequently learned that Mr. BILLING'S machine, though no doubt an excellent one, was large, somewhat complicated, and costing four or five times the price of his, and probably intended rather for a stationary power to work in a manufactory, than for the general use of hemp-growers, to be worked by their hands, on the plantation, or in the fields. Under the circumstances he applied for a patent, which was granted, and Mr. OBED HUSSEY, of Baltimore, machinist, the ingenious inventor of the Reaping Machine, has become interested in it, and will take means to introduce it to the attention of the hemp-growers of the West.

Nothing can be more simple in its construction. The rudest and roughest hands can work it, and with little danger of its getting out of order. The cost of it will only be from $75 to $100, exclusive of the horse-power. It requires about a two horse power to work it. From my own experience in the use of it, I can confidently say, and assure my brother farmers of the West, that the largest crop of hemp they grow would hold out no terror, so far as the breaking and scutching of it was concerned, with the use of this machine. My clear conviction is that it will go into very general use in the hemp district, and prove an important acquisition to this branch of Agriculture ; and if it does, though not having the slightest pecuniary interest in it, I shall feel myself highly rewarded for the interest I have taken in the enterprise.

Truly yours,

CHAUNCEY P. HOLCOMB.

Devondale Farm, near Newcastle, Del., 1847.

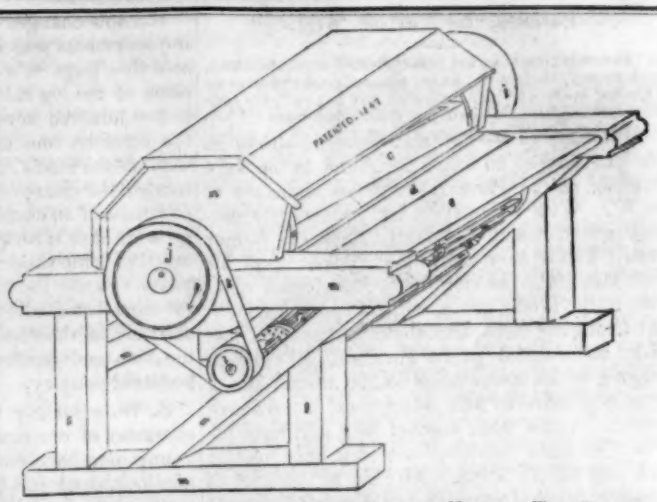
SPECIFICATION OF HOLCOMB'S HEMP-BRAKE.

To all to whom these present shall come :

Be it known, that I, F. P. HOLCOMB, of the town and county of Newcastle, and State of Delaware, have invented a new and useful machine for breaking and cleaning hemp at one and the same operation: and that the following is a full, clear and exact description of the principle or charac-

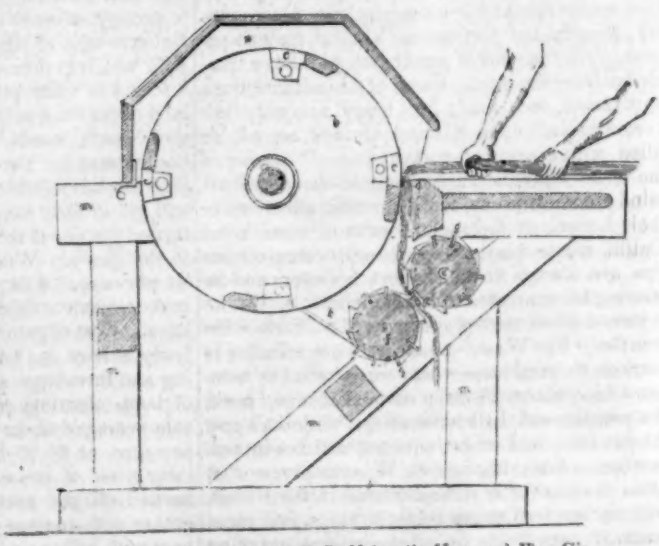
ter which distinguishes it from all other things before known, and of the manner of making, constructing, and using the same, reference being had to the accompanying drawings, making part of this specification, in which fig. 48 is a perspective view, and figure 49 a verticle section of the machine. The same letters indicate like parts in all the figures.

In machinery heretofore employed for breaking and cleaning hemp, &c. at one operation, by revolving brakes, the hemp has been acted on during a large portion of the circle of revolution, the hemp being broken by passing it between a pair of rollers or revolving breaks and scutchers, that mesh into each other, and break the hemp by bending it short between them. This method is highly objectionable, in consequence of the great length of the fibre over which it is scraping, which is found to wear the hemp in practice so as to render it unmerchantable; it has also been attempted to break and clean the hemp between a revolving break and a stationary concave, but this method is liable to the same objections. In fact, the hemp never can be broken and cleaned by the same roller that breaks it, without subjecting it to injurious wear. Consequently, the machines have been abandoned as useless; for if the hemp is broken by a stationary break, against which the revolving break acts, and thence passes to another wheel, placed in contact with said revolving break, to be scutched, the break scrapes over the hemp the whole distance from the bed-brake to the point where the scutcher acts, and wears the surface into tow.



(Fig. 48.) *Perspective view of F. P. Holcomb's Hemp and Flax Gin.*

My invention is for the purpose of obviating these difficulties, and is of the following nature: I employ a large revolving break, with the swords set at a tangent (this is necessary to the well working of the machine, as a small one would present the swords at too great an angle,) which acts against a stationary bed-plate, and there breaks the hemp as it is presented by the hand. The ends of the hemp, as soon as they pass down below the edge where they are broken, are thrown off by the centrifugal action of the revolving blades, and they do not come in contact with it any more, but as the hemp is fed in, the ends aforesaid pass down and are caught between the scutchers at the angle of their junction, without laying against either so as to be rubbed, and is thus cleaned. The scutchers are very small cylinders, with blades projecting from them radially, that only mesh slightly (if at all) past their pitch-lines; these only act on that part of the hemp immediately between them, or at the junction of their curves to clean it, and it passes through them without injury—which is not the case where the breaking and cleaning are done by the same wheel or roller on the different parts of its circumference.



(Fig. 49.) *Sectional view of F. P. Holcomb's Hemp and Flax Gin.*

The construction of my apparatus is as follows: On the cap-pieces of a suitable frame (*m*) I suspend a shaft (*a*) in suitable bearings, on which I affix two cylinder heads (*b*), to which I attach any suitable number of slats or beaters (*c*); these are placed diagonally, and are made to act on a straight, horizontal, stationary bed piece (*d*), which is armed with iron and attached to the frame (*m*); back of this bed-piece, and a little below its surface, there is a feed-board (*o*), over which the hemp is fed into the machine; just below the bed-piece, two small scutcher cylinders (*f*) are so placed as to receive the hemp between them without wrapping on either, the blades (*g*) of which may work into each other more or less, according to the material to be acted on. The hemp is held in the hand of the workman to be cleaned, and is presented over the bed-piece (*d*), (as clearly shown in figure 49,) where it is gradually broken as it is pushed in, and the ends are thrown down in between the scutchers, where the shieves or hurds are thrown out. The hemp in this way is fed in, cleaned half its length, and then turned and the other half finished, and the hemp comes from the machine in a perfect and merchantable state.

Having thus fully described my machine, what I claim as my invention, and desire to secure by letters patent, is the combination of the stationary bed brake and the rotary break, and small scutchers arranged in the manner described, so that the hemp can be fed in by hand, broken and cleaned with but one handling and at one operation—the breaking and cleaning being done on separate cylinders, but the parts so arranged as that they are brought close together, and so adjusted as to only allow the machine to touch that part of the fibre that is to be acted on, thereby preventing its wear in the machine. F. P. Holcomb.

Witnesses, { A. P. Browne.
J. J. Greenough.

Farming, &c., in the West.

"For what man in his senses would ever undertake, with money, to clear up, fence, and put good buildings on a quarter section of wild land with any hope of ever realizing the amount of his outlay in dollars and cents?"

MR. EDITOR:—The above query, almost in the language of an *axiom*, is found in the July number of the Farmer, over the signature of S. W. With due respect for your worthy correspondent, whom I imagine a fat old farmer seated in his easy chair, looking out upon his fine farm, with its rich fields, his elegant mansion in the lovely grove, with its sparkling fountains, singing birds, and soothing zephyrs, just about in the center of the world with all creation jogging on its monotonous course around him, I must beg leave to take exceptions to the above query. As he takes another long pull from his "best Virginia fine cut," see what benevolence and pity fill his mind. Ah! he is thinking of the poor, deluded pioneer; the children of the west—sons of the forest, &c., who have left the "rich alluvial" of New York for a "barefoot living," and ague to boot, in the western wilderness.

We of "the west" are often amused by such like sentiments and boy descriptions of our country, people, and "et cetera," in the eastern papers, from the pens of gentlemen who have traveled *all over* the west. Some of their descriptions aproximate the truth; but many are only impressions left upon a mind already biased, or filled with dreams of "sweet home." Some of the writers have left business that occupies their mind; dear families, that bind their affections to their homes, or the raven tresses of some loved Delila, whose parting kiss is still warm on his lips, are always floating before his eyes, and he sees nothing aright. Or like friend S. W., he "visited Ohio twenty years ago." Then Ohio was the "Far West," no means were afforded to market its produce—wheat was worth (in western Ohio) about 25 cts.; corn, 12½ cts.; pork, the powder and ball to shoot it; while salt cost $9 per bbl., and other imported articles in proportion. And although S. W. must know that Ohio is one of the richest States in the Union, with its hundred steam boats, its ships, and canal boats, its cars flying in all directions, carrying its surplus wealth to all parts of the world; yet so strong is the force of first impressions, when he thinks of Ohio, it is Ohio twenty years ago.

Seven years ago I first visited this place, (southern part of Michigan.) It was indeed a new country. Few and far between were the cabins of the first settlers. If a sleigh-ride was to *go off*, the young man in his jumper, with auger and ax to *fix-up* in case of break down, started off the day before some ten or fifteen miles through a *cut out* road or over the openings, to *gather* up the *gals*—and let me tell you, Mr. Editor, some of the same gals would not dishonor the best parlor in old Seneca.

But how changed the scene now. In the west, improvements scarcely wait for time. Comfortable dwellings to a great extent have taken the place of the log cabin, surrounded by from fifty to two hundred acres of improved land, and all the comforts one can ask. Beautiful villages, with all the bustle, the anxiety, the busy din, the school, the church going bell, and all the paraphranalia of an eastern village of half a century's growth, have sprung up from the forest as by the touch of some magic hand. And where not ten years ago the Indian trailed his weary way, or sat unmolested in his wigwam, four locomotives daily shake the earth as they fly along, bearing the rich and rapidly increasing produce of our beautiful country.

S. W. evidently has a wrong opinion of the character of our first settlers. If many of your young men have emigrated from old Seneca, let him look about and he will see that they are generally the most industrious and enterprising—drones never leave the hive till they are compelled to do so.

I would be glad to say much more about the west and western society, &c., but I do not like to occupy so much space in your valuable paper. But one case in answer to the query of S. W., with which I commenced. Two years last spring a friend of mine purchased a large tract of wild land about nine miles from here, in what we call the "south woods." He built him a neat log house, sent for the "Farmer," and left the village for the woods. That season he cleared off and got in forty acres of wheat which he told me turned out about thirty bushels per acre. Now to the query. Wild land there is worth about $4 per acre. $12 per acre will clear and fence into convenient fields the heaviest timber land we have. Cost of getting in about 50 cents per acre, (only harrow in;) cost of seed, say $1; harvesting and threshing, say $3 per acre—$20,50 cost of land, clearing, and first crop. I think the sale averaged about 87½ cts. per bushel—$26,25 per acre, or $6,25 net profit per acre, besides a lusty yield of straw. Last fall the stubble was burned off and another crop harrowed in, (together with another good bit of new land,) which now with little cost promises a good crop. Now the land should be stocked in grass about three years, when the roots will be well rotted and to all practicable purposes he will have an old farm. This is not an isolated case. In the immediate vicinity are half a dozen such farms, only a little older, beside a number smaller. Our openings require a greater outlay in team or to break, but when once broke and rotten they are like old farms.

If a young man, or old man is well settled on a good farm in "old Seneca," with S. W. I would advise him to there abide. But if his patrimony is small, or he has a large family whom he wishes to settle, he may turn a small farm there into lands

at the west, where in ten years, by industry and the rise of property, he may have a valuable estate. Others there are who have with difficulty saved enough to move to the west, yet by industry and hard work, a few years have seen them comfortably settled on a forty or an eighty of their own; whereas, had they stayed east where land is high, they would never have thought to do more than support their families. Others again, who have failed east, have emigrated, and in a few years with a new community and new circumstances, have retrieved their broken fortunes. Finally, the number who have lost property by moving west I think comparatively few.

With high esteem,

J. W. Falley.

Hillsdale, Mich., July 11, 1847.

Deep Plowing.

Mr. Editor:—The term deep plowing, or plow deep, is frequently used in your practical paper. The thought often occurs to me how various it is understood by different farmers. One that has practised plowing four inches deep understands it to mean five inches; another that has plowed five, understands it to be six inches, and so on. I understand deep plowing to be ten inches—very deep, twelve. All farmers, with few exceptions, say they plow deep.

Now would it not be well, when speaking of deep plowing, for the writer to say six, eight, or ten inches, as the case may be, so that all may understand alike. Different soils require to be plowed various depths, but they may be classed so that the common farmer may readily understand the kind of soil indicated by the timber they have last produced, as a general thing. So far as my observation has extended, in Western New York, white oak, black oak, and hickory belong to one class of soils; beach and maple to another; pine another, and hemlock another. There is a marked difference in soils of land differently timbered. If all farmers would be to the little trouble of measuring the depth they plow, much to them would be gained. I say it not by way of satire when I state that but few know the depth they plow; it takes much practice to guess with accuracy the depth they plow.

I hold it to be of as much importance to give the precise depth in plowing in giving a description of an experiment on an account of a crop offered for a premium as any one thing. Let all remember that the deeper we plow the larger our farms are, without any additional taxes.

Penn Yan, 1847. I. Malmory.

Medicine for Hogs.—The American Farmer furnishes the following: "When your hogs get sick, you know not of what, give them ears of corn, first dipped in tar, and then rolled in sulpher. 'Tis ten to one that it arrests the disease and restores the pig to health."

Soaking Seed Wheat.---The "Farmer."

I have observed that it has been quite an object with the farmers, as far as my acquaintance extends, (and I have had some practical knowledge in the business heretofore,) to prevent smut in wheat. This may easily be done, and at trifling cost, by soaking the seed from 24 to 36 hours in a solution of *blue vitriol.*

Dissolve blue vitriol in the proportion of 1¼ oz. to the bushel of seed in warm water sufficient to dissolve; pour this into cold water sufficient to cover the wheat in a tub or other vessel, into which put the seed wheat; let it stand (stirring it occasionally to prevent fermentation,) for 24 or 36 hours—then drain off the liquor and sow it, and in no case, if properly prepared, will there be any smut found in the crop. It is practiced in this country by many, and I have tried it myself, and am sure it is a preventive.

I do not know but all farmers are acquainted with some way of preventing smut in wheat; but there is no way within my knowledge so simple and easy as *vitriol.*

The agricultural interests of this whole farming community might be very much improved, could the farmers be induced to subscribe for and attentively read the "Farmer;" and why they will not do so generally, is what I cannot understand. They have funds enough if they wish a political paper, and do not neglect their sons and daughters personal appearance as to expensive clothing or fashionable ornaments.—Better store their minds with a thorough practical knowledge of agriculture, and ornament their dwellings with useful and convenient appendages at less expense.

I have written much more than I intended when I commenced. I only meant to say a word of encouragement because I wish you success in your labors. I believe there is no subject of more importance than agriculture, and endeavors ought not and I believe will not be unassisted to improve it throughout our entire country.—Every principle of philanthropy and benevolence is, or should be, engaged to exalt agriculture as as a calling, in the score of intelligence, to where its importance seems to indicate it ought to stand, viz: at the head of the most honorable employments in our free and happy country.

You will pardon my tediousness.

Respectfully yours,

Ira F. Gleason, P. M.

Clymer, Chau. Co., N. Y., 1847.

Black and White Paints.—Tools, wagons, &c., painted black, absorb the sun's rays, become hot, and warp and crack. Painted white, they reflect, and do not absorb the rays, and consequently do not become hot, and they remain uninjured by warping. Hence all wooden articles should be painted of some light color.

MR VAIL'S "LADY BARRINGTON IIId."

D. D. T. Moore, Esq.—As you are about giving to the public through the medium of the Genesee Farmer, a portrait of my imported Durham Cow "Lady Barrington 3d," to which animal was awarded the first premium for the best Durham cow in the first class, at the New York State Agricultural Society's Show, held at Auburn, in September last, I have thought it might be of some interest to accompany the portrait with her pedigree, and an extract of a letter I received from Thomas Bates Esq., of Yorkshire, England, her breeder, and from whom I purchased her. The following is the pedigree, as given by Mr. Bates:—

"Lady Barrington, 3d, bred by Mr. Thomas Bates, of Yorkshire, England, calved 22d February, 1840. Got by Cleaveland Lad, (3407;) dam, Lady Barrington, 2d, got by Belvidere; (1706;) g. dam, Lady Barrington, 1st, by a son of Mr. Mason's Herdsman, (304;) g. g. dam, Young Alicia, by Wonderful, (700:) g. g. g. dam, Old Alicia, by Alfred, (23;) g. g. g. g. dam, by Young Favorite, by son of Favorite, (252.) Cleveland Lad, (3407,) the sire of Lady Barrington, 3d, was awarded the highest premium at the Royal English Agricultural Society show, at Liverpool, in 1841, and also the same year the highest premium at the Yorkshire Agricultural Society's show, at Hull, and he is now in the possession of Lord Feversham, at Duncomb Park; his grandsire, Belvidere, (1706,) was sire and grandsire of the Duke of Northumberland, (1940.) Lady Barrington, 1st, was bred by Lord Barrington, and this was his favorite tribe of cows from 1794, and I bought my first Lady Barrington in 1831, after his death. This tribe of cows generally breeds females, and will breed well to your Wellington Bull."

I will add that this cow was awarded the first premium at our Renssalaer Co. show last autumn, and is a good milker. She gave 22 quarts of milk a day, previous to sending her to the Auburn Show, and is the dam of the bull calf (got by my Wellington bull,) which I sold about a year ago, to Col. Hampton, of South Carolina, when about four months old, for three hundred dollars.

I also send you a paper containing a short description of the stock of Thomas Bates, Esq., of Yorkshire, England, from whom you will perceive I make my importations. In addition to the first two animals I had from Mr. Bate's Bull Duke of Wellington, purchased when about 4 months old, and a two year old heifer (Duchess,) both of which cost me $1400 delivered on my farm. For the last three years I have imported annually one cow sent by Mr. Bates—the last one a red and white heifer (Arabella,) which I received six or eight weeks ago.

These animals possess the superior combinations of fine prominent briskets, handling qualities, good compact form, and good milking qualities. Many think a cross of this blood will improve almost any Short Horns. I have no difficulty in selling the Bull calves from my Bates bulls and cows, when quite young, at $300 each. I have an order ahead for the first one I can spare, at that price.

Yours very respectfully,

Geo. Vail.

Troy, N. Y., August, 1847.

Fair of the State Agricultural Society.

Our friends will bear in mind that the Fair is to be held on the 14th, 15th and 16th of this month, at Saratoga Springs. Notwithstanding the location, we hope Western New York will be well represented. We annex such information relative to the arrangements as we have obtained since last month:—

☞ The Railroad Companies between Buffalo and Saratoga will convey passengers to and from Saratoga at ONE HALF THE USUAL FARE. Stock, Implements, &c., will be forwarded free of charge. Persons wishing to send stock, &c., from this section should apply to WM. WILEY, Esq., at the Railroad Office in Rochester. A freight train for the transportation of Stock and Implements will leave Rochester at 5 o'clock, A. M., Sept. 11th. Every thing intended for this train must be at the Depot as early as 8 P. M. of the previous day—Friday, the 10th.

☞ The Rail Roads from Saratoga to Schenectady and Troy, are undergoing a thorough repair, and the board have assurances that they will afford every facility which can be expected from them in the transportation of stock as well as visitors to the Fair.

☞ Persons intending to send stock and articles for Exhibition by the Albany & Schenectady Rail Road are desired to communicate with *C. L. Lynde Esq.* Superintendent at the office of the company Albany. Articles should be directed to his care, with plain and full directions. Those intending to send by way of Troy, will direct to the care of *Jonathan Edwards, Esq.*, President Troy & Greenbush Rail Road. Greenbush, and with full directions. All articles left to the care of either of the gentlemen above named, will be forwarded without delay.

☞ Those who intend to compete for premiums should remember that all animals and articles must be ready for examination on the *first day* of the Exhibition—that is, on *Tuesday, the fourteenth of September.* The first day will be devoted exclusively to the examination by the judges of the animals and articles exhibited, and no persons will be admitted within the enclosure on that day, except the officers of the society, judges, and exhibitors.

☞ Judges appointed for the Fair are desired to be present at Saratoga on Monday the 13th.

☞ The proprietors of the Hotels, &c., at Saratoga, have agreed to charge ONLY their usual rates for board during the State Fair—from 75 cents to $2 00 per day.

Agricultural Fairs for 1847.

AGRICULTURAL FAIRS are to be held, this Fall, as follows. From other Societies we have not received information.

New York State,	Saratoga Springs,	Sept. 14, 15, 16.
Cayuga County,	Auburn,	Oct. 6, 7.
Erie "	Buffalo,	Sept. 22, 23.
Genesee "	Stafford.	Oct. 7, 8.
Jefferson "	Watertown,	Sept. 9. 10.
Livingston "	Geneseo.	Sept. 28.
Monroe "	Rochester,	Sept. 22, 23.
Ontario "	Canandaigua,	Oct. 12, 13.
Oneida "	New Hartford,	Sept. 23, 24.
Orleans "	Albion,	Sep. 30, Oct. 1.
Seneca "	Ovid,	Oct. 14, 15.
Saratoga "	Ballston Spa,	Sept. 8.
Wayne "	Lyons,	Oct. 6, 7.
Wyoming "	Warsaw,	Sept. 29, 30.
Yates "	Penn Yan,	Oct. 1.
Vernon Center,	Vernon Center,	Oct. 6.

FAIRS IN OTHER STATES AND CANADA.

Caledonia County, Vt.,	St. Johnsburg Plain,	Oct. 7.
Rutland " "	Rutland,	Sept. 29, 30.
Worcester " Mass.	Worcester,	Sept. 23.
Provincial Ag. Assoc'n,	Hamilton, C. W.,	Oct. 6, 7.

Winter-killed Wheat, &c.

MR. EDITOR:—As this is a subject of great importance, suffer me to give you a few thoughts on it, in addition to those offered by "W. S." in the June number of the Farmer.

In all parts of the country which I have visited, this calamity has befallen the farmer and his crop. In some places I have seen acres with scarcely a root alive, and what few have stood the frost are so blighted and stunted by the heaving of the main roots out of the ground, as to look sickly, and stand a fine chance for receiving the seeds of parasitic plants, [rust and mildew.] As far as my observation extends, one-fourth of the present year's crop has been destroyed, or greatly injured, by this cause. I agree with your correspondent that "if a thorough system of draining was adopted, and all the superabundant water drawn off, very little winter-killed wheat would be seen." But a method which I have practiced to some extent nearly eradicates the evil: this is to plow the ground deep, and put it into small lands, leaving the dead furrows deep, and then cleaning them out thoroughly with a shovel and plow.

This, at first thought, would seem to be an immense deal of work; but it is not. Let the furrows run towards the main ditch, or natural water course, then the loose earth plowed out, and lastly go through with a long crooked handled shovel, and clean them thoroughly out. A man can clean from four to six acres in a day, and do his work well. Many farmers have tried landing up for wheat, and have not paid any attention to cleaning out the water courses, and have failed, and had their wheat killed as bad as ever.

I have raised excellent wheat on land that was naturally covered with water three-fourths of the year. I think that it is of great importance on such lands that wheat should be sown very early in the season—as soon as the last week in August or first of September, so that it may get a good root, and grow deep in the soil. I suppose, too, that if wheat gets up thick and covers the ground, it will protect the soil sufficient to keep it from heaving with the frosts of spring. If this method of putting in wheat be adopted, together with feeding the crop with manures adapted to it, —such as gypsum, lime, ashes, and other ingredients of the crop—we shall hear much less of our wheat being winter-killed.

Yours, as ever, F. W. L.

Greece, Monroe Co., 1847.

MONROE COUNTY FAIR.—Our friends in this section will not forget that they are expected to attend the Fair, on the 22d and 23d of this month, and to bring whatever they may have that will add interest to the exhibition. The Cattle Show will be on the 22d. The exhibition of Fruits, Vegetables, Butter and Cheese, together with all articles under the head of "Ladies' Department," will be held in connection with the Horticultural Society, in MINERVA HALL, on the 23d. [For Premium List, &c., see Rochester weekly papers, and show bills.]

Interesting Extracts of Letters from Chautauque.

AGRICULTURAL GEOLOGY, &c.

WERE our soil not of that class denominated acid soils, we might be much benefited by the use of gypsum. Having no marl in our vicinity, we have to use the more tedious and slow process of a clover ley; and (in most cases,) barn-yard manure that has been leached by the snows and rains of winter and spring. Such farmers I think cannot get a very great dividend on their bank (I mean manure bank) stock. I am aware that there exists much perplexity as to the correct treatment of soils here, for they are of several different kinds, on the same farm.—They seem to be the disintegration of different strata of rock, and at different epocs. There is also the very marked appearance of the two first tables as you recede from Lake Erie, being once the beach of the lake, from the similar manner of the position of the large stone under the surface, and also the vast amount of washed pebble-stones intermixed with coarse sand and dirt.—The second flat is, as I before stated, an acid soil, gypsum giving no known results either on grass, grain, or clover.

The third flat is a deposit made by the many streams that flow into the lake from the hill, which is from two to five miles from the lake.—Here is a fine chance for the geologist to display himself agriculturally. I should be delighted to see Dr. LEE, in this section during some of his vacations, to take a peep at our country and soils, and say to us what we need to walk up by the side of old Monroe and Genesee.

I have bought me a farm of fifty acres, lying on the third, and running up to the hill nearly. It is in rather a low state. I shall drop the handsaw and plane for the hoe and plow. Any advice relative to our soils and their management will be gladly received. I shall write still more on the soils and what grains seem best adapted.

Yours respectfully,

—— B. S. E.

MR. EDITOR:—Again I will trespass on your time for a few moments, while I renew my engagement in my previous letter. As I stated, the lake level has three distinct, different soils, unlike in their general features. The first, commencing at the shore of the lake, is a sand intermixed with yellow dirt, or a species of loam, varying from ten to twenty feet in thickness, lying directly upon strata of black slate, strongly impregnated with carbureted hydrogen gas.—This strata of rock is underlaid with a thin layer of hard, grey stone, much used for building purposes, lying at and under the surface of the water. Immediately under this is the Lockport fossiliferous limestone, of a thickness not here ascertained. Mr. HALL, state geologist, visited here, but I did not get the depth.

The stratum of rock as presented at the shore of the lake, exhibits various contortions, evidently the action of volcanic force, which force the surface presents; the soil, lying in layers of the same shape of rock, underlaying. This soil is also impregnated with the above mentioned gas; and, also held in solution by water, are alumina and sulphate of iron, which is often found chrystalized by evaporation of the water as it exudes and drips down the edge of the rocks. This soil is well supplied with moisture, it being excellent grass land, and excellent for spring grains, and in some places for winter, giving a larger yield than either of the others. The timber growing upon it is the same generally found in this latitude and climate. The beech, linden or bass, sugar maple, iron wood, hemlock, and some ash and whitewood, &c. This range varies from a half to one mile in width. Between this and the gravel range, as it is termed, is a strip of spouty land, varying in width, termed swail, filled with durable springs of excellent water, some of which are sufficient to carry machinery.

The gravel, or second range, generally rises from ten to fifty feet above the first, and gradually rises until it strikes the third range. It is denominated the gravel ridge from the fact that it is formed entirely of small round washed pebbles, as found on the present beach of the lake, intermixed with soil formed by the abrasion of the different kinds of stone of which the ridge is composed. In digging for wells and other purposes, the gravel is found in layers of coarse and fine gravel alternating; in some of the layers of both is found a substance, white and sometimes of a yellowish cast, which unites the pebbles so that it is almost impossible to break it up with a pick. There are occasionally large flat stones interspersed, as they would naturally be thrown upon the beach of as large a body of water as Lake Erie. The soil is loose, having a deep loose sub-soil, so that the superabundant water passes freely off; in summers too dry many times.

You discover that whatever we apply as manure does not remain long, consequently a constant application is necessary for the increase of the elements necessary to the increased productiveness of the soil. The general custom is to apply the manure before plowing—in my opinion incorrect for a loose soil, preparing top dressing after plowing, *well mixed* by the use of the *harrow;* not merely once or twice passed over, but a continuation until both soil and manure become finely cut and united; then apply the seed and well harrow in. The rains will then decompose the manure, and carry the elements to the roots of plants; while, on the other hand, the manure is at once placed deep below the roots of most plants while growing, and by the time that they are matured sufficient to reach the manure, most of it has been carried down, by rains, to enrich the sub-soil, and by discount the farmer suffers a loss of more than one-half of his

bank stock. No wonder they think they must have large farms to get rich on, or migrate towards the "setting sun."

This soil is what I denominate an acid soil, from this one fact—it produces sorrel of an excellent growth. The cereals do not give a very great yield until much labor has been expended for its improvement in humus, by a prolific application of stable manure and clover ley, yet the acid seems to be too prominent for a satisfactory return for the toil of the farmer. As lime is quite expensive here, how would leached ashes do to counteract the bad effects of the acid? Fruits cannot be grown to perfection on it, as a general thing; drouth affects them too much, and also it affords a fine harbor for the curculio, and other insects. B. S. E.

Portland, Chau. Co., 1847.

Remarks.—The fact that a soil produces sorrel is not conclusive that it contains an excess of acid, although it furnishes a strong presumption that such is the case. Place a pound or two of the soil in a large bowl, add a pint of pure rain water and let it stand thirty-six hours, and strain through several thicknesses of clean cotton cloth. If the liquid be sour or acid, it will change vegetable blues to *red*. This is tested by a strip of paper colored blue by cabbage juice, litmus, or any other organic substance of the right color.

On the open gravelly ridges in Portland and elsewhere, leached ashes will be of essential service both mechanically and chemically. But in all sections where lime is expensive, *unleached* ashes should be husbanded and applied to cultivated fields with the utmost care. Our Chautauque friends will do well to act on this hint.—They have a good deal of land that needs *draining*. This will remove that excess of alum, copperas, and other salts which exist in portions of several towns with which we are acquainted.

Expensive as it is, our correspondent and others in Chautauque should give each fruit tree a half bushel of lime spread over all the roots, and well incorporated with the soil. To this, a bushel of good ashes will be a valuable addition. As a barrel of choice American apples are usually worth more in London than a barrel of Genesee flour, we expect to see the time when the lake towns of Chautauque will ship cargoes of this fruit to England and other foreign markets.—Good railways from Westfield to Boston and New York, and a free navigation from Dunkirk to the gulf of St. Lawrence, will greatly benefit the farmers of Chautauque county, as well as many others.

Those that sell cheese, hay, or grain, must never forget the fact that they are constantly robbing their farms of *bone earth*.

Corn.—Papers from Ohio, Indiana, Kentucky, Tennessee, and Georgia, all speak of the excellence of the corn crop.

Saxon and Merino Sheep.

Mr. Editor:—Much has been said of late relative to fine wooled sheep, which are the most profitable, the Saxony or Merino. Some of our most respectable wool growers seem to be most in favor of the Saxony sheep. Very well—so be it—as many wish to wear a finer coat than can be made of Merino wool, it is necessary that some should raise the Saxony; but I find the Merino much more profitable for me, as I have given both a fair trial.

When I kept the Saxony, 2½ lbs. per head was all that I could get with good keeping; and in rearing lambs I would lose at least 15 per cent., and nearly the same in wintering old ones; and I think that there is not as much difference in their size, nor in the quantity of food they eat, as some have intimated. To be sure the Merinos are larger than the Saxony, but the difference is not great. I think that a fat sheep will not eat as much as a lean one, and certainly my Merinos keep in much better order, on the same fare, than my Saxonys did, and I seldom lose one in wintering; and in rearing lambs we seldom lose 5 per cent.; and I find it fully as easy to shear 4 lbs. per head as 2½ from my Saxonys—and indeed my ewes this year averaged near 4½ lbs. per head, counting lambs and all. My lightest fleece was 3 lbs. 6 oz., and two with lambs by their sides gave 5½ lbs. each, and one barren ewe gave 7 lbs. 14 oz. My sheep were thoroughly washed. The man who bought my wool was much pleased with it, and gave me the top of the market, 37½ cts. per lb., cash for my entire clip. My flock consists of about 200, about half of which are pure bred Merinos of the Paular kind, which I have bred from about 40 ewes and two bucks that I purchased from the most approved flocks in Vermont. The other half of my flock is a high cross of the common Merino on the native and Saxony, which makes their wool about as fine as my full blood Paulars, but do not give near as heavy fleeces. Now I say let every one make his own calculations, and keep the kind of sheep he pleases.

Very respectfully yours,

Reed Burritt.

Burdett, Tompkins Co., N. Y. July, 1847.

Stone Rope.—A rope, nearly three miles long, now lies at Gateshead, England, which was the other day a stone in the bowels of the earth! Smelted, the stone yielded iron. The iron was converted into wire. The wire was brought to the wire-rope manufactoy near Gateshead, and there twisted into a line 4,660 yards long. It is the stoutest rope of the kind ever made.

It weighs 20 tons 5 cwt. and will cost the purchasers $5,508. It is intended for the incline on the Edinburgh and Glasgow Railway near the latter City. A rope of hemp, of equal strength, would weigh 33½ tons and cost $1,400 more.

Items from S. W., of Seneca County.

THE WEATHER, CROPS, CHEESE, CORN, &c.

Dear Doctor:—Our farmers are in the midst of their wheat harvest; crop is hardly an average. If you would believe the croakers, it has been more than half winter killed. The tropical regions might envy us our long hot days, and dry, calm, stifling, warm, short nights, during the last three weeks; corn can't grow in their 12 hour cool nights as it does here in our 8 hour hot ones. Now and then I hear an ignorant lazy farmer say that his corn is suffering for water—while all those who planted early and put fresh manure at the root, boast how fast it grows.

I never saw the good effect of artificial water, made by the union of the hydrogen of stable manure with the air's oxygen, as during this hot dry weather. Had Pætzholdt lived in our hot dry climate, he would have said less about burning vegetable matter for the benefit of its salts alone. As our seasons are, it seems to be indispensable to a good garden to spade in long manure every spring for its water forming agency alone. I believe that one half the benefit fruit trees in our climate receive from artificial manure, is from the water it forms during our summer drouths.

Why is it that of all the trades and callings pursued by man in this country, farming is the one doomed to traditionary error, and the vagaries of the crazy moon? It is precisely the reverse of this in China, for there the earth is improved to its utmost capacity, in the productions thereof; while the unwieldy Junk, now exhibiting at New-York, shows that their naval architecture is the same it was before the Christian era. Many a man has lost his labor, and a crop with it, waiting to plant in the *new* or the *old* of the moon. Three farmers out of five, will tell you that Indian corn will yield more with suckers on than off; yet actual experiment, at the same time, in the same row, proves that with the suckers off the ears form earlier, and that both ears and stalk are much larger.

I have heard one farmer of long practice say that sandy land should never be plowed deep, while another farmer whose farm is a very light sandy loam, says that his wheat failed entirely, until he commenced deep plowing, and that this alone has restored the former yield to his land. But if the economy of farming was committed to farmers' wives, I cannot but feel that there would be less stolid prejudice, and more of modern progress in it—if I may judge from the adroitness with which some of them contrive to sell salt and buttermilk for butter, and the quantity of cream others abstract from their cheese. I defy organic chemistry with its alkali's and acids to bleach a cheese so thoroughly of its oily coloring matter, as some good farmer's wife has done to a heavy, well bandaged individual of the *canine* family, lately imported here from Buffalo. I fear such frauds will be as long as our naughty, though thriftless country merchants continue to offer their tempting merchandise in exchange for poor butter and worse cheese.

I believe there are twice as many acres of corn in Seneca county this season as usual; with the aid of the present rain the crop is certain to be good. Prices of breadstuffs and provisions must be very low the coming season, unless there is another short crop in Europe. 'Tis true that the keeping open of the English ports until February, will induce larger shipments from this country as soon as freights fall to correspond with the fall in produce; but what market can maintain even moderately low prices, in the face of such an avalanche of produce as our great west is now growing to send forward. S. W.

Waterloo, Sen. Co., July, 1847.

"Slobbers" in Horses.

I was not a little surprised on reading, in vol. VI of the "Farmer," that the cause of this troublesome malady, (or whatever it may be called,) is unknown to farmers. I had supposed, and I still think, that the "Slobbers" were caused by the plant called by Botanists, "*Lobelia inflata*," generally known by the name of "Wild Tobacco," "Indian Tobacco," &c. It grows, according to the quality of the soil, from 6 to 18 inches high, is branching, hirsute; has a pale blue, irregular corol; capsule, or seed-vessel, bladder-like, i. e. inflated, whence its name "inflata;" has a sharp, biting taste, and if eaten causes temporary sickness at the stomach, and generally a flow of water from the mouth. It is used by some physicians as an emetic. It generally grows in thin grass, particularly on poor soils, and appears in flower in July, about the time when horses begin to be troubled with the "Slobbers." H.

Fairport, July, 1847.

New Era in Navigation.—On the 20th May, a three masted schooner anchored outside Chicago harbor, loaded with 10,000 bushels of wheat, with which she had cleared for Liverpool. She goes by the way of the Welland Canal and St. Lawrence. This is the first clearance of the kind ever made from the inland waters of the great lakes for a European port, and constitutes a new era in the history of navigation.

To Relieve Colic in Horses.—Rub spirits of turpentine on the breast of the horse, and if he be drenched with it, also, he will be relieved. Horses should never be put to severe work on an empty stomach; but more horses are hurt by hard driving after a full feed, than by a full feed after hard driving.

How to use Straw as Manure.

Mr. Editor:—I wish to inquire of the wheat growing readers of the Genesee Farmer what, in their opinion, is the best and most economical mode of converting straw into manure. When we have large quantities of straw, I conceive it to be quite an object to the wheat grower to endeavor to return it again to the soil in the shortest possible time, and in that way in which it will be likely to be most beneficial to the growing crops. I have observed that some farmers allow their straw to remain for years, in stacks or heaps about the barn, or other place when it was threshed, allowing their cattle to run to it at pleasure. Others perhaps will draw it out early in the spring, and throw it in heaps upon the ground which they intend for a fallow, letting it lay until they are about to break up the ground, and then spread the straw. Others again, as soon as the ground is sufficiently settled in the spring, draw their straw on to their fallow ground, and spread it as even as possible over the surface in order that the clover and other grass may sprout up through it, and before time for breaking up it will probably be so far rotted that it will not interfere with the plow. And again, there have been others so anxious to dispose of their straw in a summary manner, that they have even applied the torch to it; but I trust that in this day of agricultural improvement there are few farmers but what know how to make a better use of it.

I will here state the mode I have practiced for the last two or three years, not because I conceive it to be the best that may be adopted, but because I hope by so doing to get the experience of others through the Genesee Farmer, as I am comparatively a new beginner. At the time of threshing I make a pen sufficiently large to contain my straw, and keep the fence up until the straw is all taken out, as I consider this to be a much better plan than to let the cattle run to it at pleasure, as in that case perhaps not more than two or three of the most able ones will get any or but little if any; besides there have been instances of cattle having been killed in that way, by having pulled out so much from one side as to cause it to fall upon them. As soon as winter sets in, I commence cutting down my straw stack and throw it out profusely into the yard, once or twice each day. My object is two-fold—first, to let the cattle and sheep pick out of it what they choose, which is no inconsiderable item towards wintering them; and secondly, while so doing they are trampling the straw to pieces and manufacturing it into manure. But, by the way, for the past winter I have stabled my cattle every night, giving them plenty of straw for litter, and I would just say to any who are not satisfied that the superior condition of their cattle in the spring will pay for the extra trouble of stabling them—why, then, try it, that 's all.

But to return. By the time winter is fairly through my straw is pretty much all under foot in the yard, and having become thoroughly saturated with the rain and snow, is in process of decomposition. There I let it remain until after breaking up my fallow, and just before cross plowing I haul out all my barn yard manure, including straw; spread it as even as possible, and plow it in. Now I should like to know if, after the straw is in the condition described above, it will pay the extra expense of money and labor to purchase lime and leached ashes in order to make it into compost heaps—lime to cost ten cents per bushel, and leached ashes twenty-five cents per load; the ashes to be hauled one mile, the lime four or five miles.

By giving the above an insertion in the Genesee Farmer, you will much oblige, Yours, &c.,

Webster, April, 1847. A. Reynolds.

Our correspondent's views in relation to the best methods of returning straw back to the land as manure, are generally correct. All that the barn-yard and stables will carry, should be thus used. Top dressing pasture and meadow lands in the fall with an evenly distributed and not too heavy a coating, is also one of the best methods of disposing of the over plus; and a top dressing to wheat immediately after sowing, and especially knolls, that are liable to blow bare of snow, and low places liable to winter-killing, are wonderfully protected and benefitted. Such a process will in all cases add one-quarter to the crop. So important is it considered in England that the process is dignified by the appelation of "Gurneyism," (see Colman's Tour.) Its distribution on meadows is objectionable when performed in the spring, as it will not become sufficiently packed and rotten but what it will rake up with the hay. Burning is decidedly injudicious and wasteful.

Gates.—Every field on the farm should be entered by a good self-shutting and self-fastening gate. How long does it require to take down and put up a set of bars? At least two minutes, which, if repeated three times a day for a year, amounts to thirty hours, or three days of working time—which would nearly pay for a good gate. Or, examine it in another point of view—three times a day is eighteen hundred times a year; now is there any man between Halifax and California who would take down and replace a set of bars eighteen hundred times in succession in payment for a farm gate? Hardly—yet this is the price yearly paid by those who use bars that are constantly passed and the gate is not obtained by it. Again—how much better is a well hung gate, than one half hung?—or one with a good self-fastening latch, than one with a pin crowded into an auger hole? Try it by dragging a badly hung gate over the ground, eighteen hundred times in succession, securing at each time with a pin, and see if you do not think this labor would pay for good hinges and latch.

To prevent Oxen hauling apart.—Some oxen have a very vexatious trick of hauling apart when in the yoke. Mr. Francis Wingate, an experienced farmer at Hallowell, informs us that he prevented this in a yoke of oxen, by placing a small rope or line, a cod line for instance, across from the horn of one ox to the horn of the other, thus bringing their heads in some degree together. The line should be tied round the tips, which, if they have balls on, may be kept there very easily, and should be proportioned in length to the length of the yoke.

If this simple remedy will obviate the trouble in all oxen addicted to this trick, it is worth knowing. If the rope be tied around the tips instead of around the roots of the horns, they will have less purchase upon it, and smaller cord will answer the purpose.—*Me. Farmer.*

Recipe for making Black Ink.—"Two quarts of rain water, one half lb. nutgalls, three ounces gum Senegal (arabic,) three ounces sulphate of iron; soak the nutgalls in three quarters of the water; the gum arabic in one half of the remaining water, warmed; the sulphate of iron in the other half; let them stand in the several vessels 48 hours, then mix them, and the ink is made. This recipe was received from Dr. Webster, Prof. of Chemistry in Harvard University."

HORTICULTURAL DEPARTMENT.

CONDUCTED BY P. BARRY.

THE "Insect Blight" on trees is, in many sections of the country, prevailing to an alarming and quite unusual extent. Up to the present moment it has dealt out more destruction, this season, than in the whole course of the last seven years put together. We have watched the manner and progress of its attack, and battled with it from day to day for nearly two months past, and yet feel utterly unable to say a word more satisfactory in relation to it than what has already been said in the Farmer and elsewhere.

The apple, pear, quince, crab, and even the walnut and hickory in the forest, have all suffered. We have seen several orchards that seemed as though they had been scathed by lightning, and some persons have attributed it to that cause. We first noticed it here in the latter part of May, just when the apple was passing out of bloom, and when the fruit were just formed. And now (July 26,) it seems not to have abated a whit.—It has followed up its attacks on some trees, particularly the pear, which is most susceptible, until they are cut nearly to the ground, and not a few are entirely killed. This is what is generally known in this section of the country as the "Fire Blight," and there is no doubt on our mind but that it is solely produced by some minute venomous insect, the sting of which is as poisonous to the juices of the pear tree as the bite of a rattle snake is to the human body.

On its first appearance with us this season, the fruit spurs on both apples and pears were first affected. Suddenly we observed them turn black, as if killed by a severe frost, and on cutting them away we found the branches bearing the spurs to be black and dying for several inches, in some cases a foot, below the first point of attack. Immediately afterwards the attack was began on the extremeties of the young, newly formed wood. If these were instantly cut away, perfectly clean, below the affected part, its progress was arrested; but if not cut, it proceeds down the branch into the old wood. In the apple, quince, and crab it usually stops after it has proceeded a foot or so below the first point affected; but in the pear it seems to pass downward with great rapidity, until the whole tree is dead—producing as it goes along nearly all the symptoms and indications attributed to the *frozen sap blight*, of which much has been said at the west. The sap becomes brown and thick, the bark cracks and blackens, and in spots appears burnt and hard as iron.

We have just examined trees, to-day, dying in this way, despite all efforts to save them.—One limb after another was attacked and cut away, until it finally reached the trunk, and then all is lost: the destruction is complete. These trees we know were not affected by frost. In the month of June they were as healthy as trees could be, standing on *hard dry land, with well ripened firm wood.* Among them were a Seckel, a Passe Colmar, a Steven's Genesee, a Pound, and a St. Ghislain. It is worthy of remark that here, this plague has operated mainly on large bearing trees. In close proximity to these trees we have mentioned as seriously affected, stood thousands of young nursery trees, pears, apples, quinces, &c., from one to three months old, and so far not one is affected, more or less. It is further remarkable that it prevails in certain sections of the country, in certain neighborhoods, and in particular spots in the same orchard, to a much greater extent than in others. We have seen some orchards and gardens where not a tree escaped—others at hand of these that escaped entirely in certain sections. Syracuse, for instance, it has been remarkably destructive in—others it has not even appeared. The insect we believe to be gregarious, like the locust, and that it operates mainly in the night.

We are led to this opinion from having noticed one morning, quite early, part of a row of very thrifty young quinces that had apparently just been operated upon. The evening before, there was not a symptom of any blight to be seen on them, nor in a large 25 acre lot where they grew. Now some 30 or 40, all standing in the same row, were attacked *at once;* the ends of the shoots were drooping, and the leaves and wood of the affected ones were sprinkled with large drops and globules, from the size of a pea to a pin's head, of a whitish, thick, viscid fluid, which we found soon dried up in the sun, to a small brown globule. The affected branches, too, in a few hours became black as though burnt, as is usual with the blight. We have watched closely, by day and night, for the insect, but have not, so far, found *the* one which we believe commits the mischief. We can not for a moment believe that it is caused by the *Scolytus Pyri* spoken of in Harris' "Treatise on Insects." We have had branches examined by a powerful microscope and no trace of an insect on the pith or interior could be found.

We have thus given a few facts as we have found them, for the purpose of directing attention

to the subject. We hope that persons possessing the requisite leisure and ability will spare no effort in the endeavor to trace out the true cause of this monstrous plague of fruit trees.

Since writing the above we have reason to believe that we have made some approach to finding out the true *cause* of the "blight,"—but have not room for further remarks this month.

(Fig. 50.) *The Double Crimson Carrant.*

Double Crimson Currant.

This new and beautiful hardy Shrub was noticed in the Horticulturist a short time ago. We now copy the following description and figure from that journal, as it will be interesting to those of our readers who are forming collections of really choice and rare ornamental things:

"This new and charming variety of the Crimson Flowering Currant, is a seedling, raised in Scotland, from *R. sanguineum*, by Mr. David Dick, gardener to the Earl of Selkirk. It is but just introduced into this country, but since, like all the Currant genus, it is very easily propagated by cuttings, we hope speedily to see it in every good collection of shrubs.

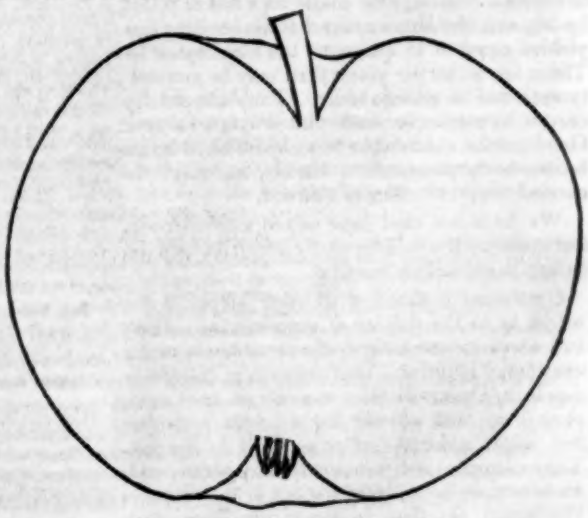
The blossoms are larger than those of the the single variety, the racemes from three to six inches in length, and the effect of the shrub, when laden, in spring, with these fine pendant blossoms, is very rich and striking. Its flowers open, according to *Paxton's Magazine*, about three weeks later than those of the parent species.

Ribes sanguineum, north of New York, should be planted in a somewhat shaded situation—on the north side of walls or buildings, or in places where it is partially shaded by evergreens. In such sites, it is perfectly hardy. It is quite likely that this double variety, being a Scotch seedling, will prove perfectly hardy with us in any situation."

The Red Astrachan Apple

This is an early fruit, of unsurpassed beauty and excellence. It is said to have originated at or near the city of *Astra Khan*, or at least in the Province of that name, in Russia.—It has for many years been cultivated in European and American collections to a limited extent, but remains at this day unknown to three-fourths of our fruit growers.

The tree is remarkably vigorous, with firm upright habit—foliage very large, doubly serrated, and whitish beneath, with long foot-stalks, tinged with red at the bottom. It is distinct in its appearance, and the eye soon becomes able to distinguish the tree from all others. The fruit is at once known by its rich crimson color, spread over with a delicate white



(Fig. 51.) *The Red Astrachan Apple.*

bloom. Mr. DOWNING very justly remarks that "the smallest collection of apples should comprise this and the Early Harvest. The tree bears early and abundantly and is the most ornamental in its form and foliage of any we know.

Fruit large; the figure above is from an average sized specimen. We have measured several this season 2½ inches in diameter. Form, roundish, tapering a little to the eye. Skin smooth and fair, of a beautiful rich crimson, covered with a very delicate white bloom as a plum; russety round the stem, with a few spots of greenish yellow. Stalk variable, sometimes an inch, and more frequently one-half to three-fourths of an inch, pretty stout and deeply inserted in a narrow cavity. Calyx closed, set in an irregular furrowed basin. Flesh white and juicy, with an agreeable acid—milder than the Early Harvest.

Strawberries.

MR. BARRY:—Will you give, through your department of the Genesee Farmer, the amount of strawberries generally raised on an acre?—the price in Rochester, the present and past season, and what way they are carried to market?—how far they may be carried by rail road, and what length of time it will do to have them picked before they are presented in market? Have you ever tried barn-yard manure and lime, mixed and applied it to the ground? If so, what has been the effect? I. M.

Penn Yan, July 26, 1847.

WE cannot speak with much precision as to the quantity, but suppose from 1,000 to 5,000 quarts may be produced, according to the fruitfulness of the sort, and the soil and culture. We believe it has been stated by Mr. HOVEY that his seedling, mixed with *staminates*, has yielded 2,000 quarts to the acre. N. LONGWORTH, of Cincinnati, says that Mr. S. S. JACKSON, near that city, has produced at the rate of 5,000 to the acre of the *Hudson* variety grown there so much. Mr. BURR, of Columbus, has produced on one of his new seedlings 35 quarts on a bed of 6 feet by 20, and Mr. HOVEY says that his seedling has yielded equal to 48 quarts on the same space.—These are all larger yields than may be generally expected on a large scale. They are usually carried to market in small pint or quart baskets. Good market sorts might be picked 6 to 12 hours before being presented in market, and might be carried over 130 miles of railroad.

We have not used lime mixed with manure, but presume it would be well enough on land deficient in calcarious material.

Cincinnati is ahead of all other places in the world as to the culture of strawberries. Over 100 acres in one neighborhood alone is under strawbersy culture. Their system is extremely simple. They will take a piece of new land, plow it up, and put out the plants in rows four feet apart, and two feet or so apart in the row. They cultivate *pistillate*, or female plants, with *staminate*, or male, in every 5th or 6th place.—Plants put out thus, in the spring, kept clean with a cultivator or plow and hoe, at small expense, being allowed to spread as much as they choose, have by the fall made out of each row a *bed* of bearing plants for the following season, with a space of 18 inches or so kept between them for a walk. New plantations are made every three or four years, or when the *staminates* become too numerous. The same system might be pursued equally well here, but the plantations would require to be protected with a covering of straw or leaves, put on in the fall and raked off in the spring.

Horticultural Societies and Exhibitions.

A NEW Horticultural Society has been organized at Albany, called the "ALBANY AND RENSSELAER HORTICULTURAL SOCIETY." JOEL RATHBONE, of Albany, is the President. From the Horticulturist we learn that its first exhibition was held in the Geological Rooms, Albany, on the 3d of July. Mr. JAS. WILSON received the premiums for Roses and Strawberries, (Swainstone Seedling,) and Doct. H. WENDELL for Cherries.

THE *Utica Horticultural Society* held its exhibition on the 29th of June. According to the report in the Horticulturist there were some fine collections of Strawberries and Roses exhibited.

The *Long Island Horticultural Society*, we learn from the Flushing Journal, held its exhibition on the 24th and 25th of June. The Journal says:—"The number of contributors was small, not half as many as came forward last season. One establishment only among the public Gardens came out strongly; but for this, the Exhibition would have been spiritless and mortifying; with it, it was gratifying and respectable. We hope that in September or October next, the contributors will be very liberal from all quarters. The display of fruit was very limited. Strawberries, and a few Cherries and Gooseberries constituted the whole, the size and quality of the former being first rate."

The "one establishment" referred to above was Messrs. WINTER & Co., who made a magnificent turn out, filling an entire room 30 by 45 feet, and carrying off twelve of the Society's premiums. We wonder what Messrs. PRINCE, PARSONS, KING, and the other large establishments were about.

THE *Horticultural Society of Montreal.*—A friend in Montreal has obligingly sent us a copy of a pamphlet containing the Constitution and proceedings connected with the formation of this new Society. The Hon. Judge DAY is President, and at the meeting for organization delivered a brief address, which in style and sentiment is surpassingly beautiful. A more eloquent argument could scarcely be penned in favor of the influence of Horticulture in refining the taste and promoting moral and intellectual improvement. The Rev. Mr. VILLENEUVE delievered an excellent brief address in French, designed, in his own words, "to represent, as in a *tableau*, the principal motives that should induce those who heard him to employ their greatest zeal in supporting and extending a Society so agreeable, and at the same time so useful." We wish we had space to spare for a few extracts from both of these. It gives us great pleasure to hear of the organization of this Society. Of its success and efficiency there can not be a doubt. It cannot be otherwise in a city so large, and numbering so many wealthy and refined inhabitants, and zealous amateurs and gardeners. An exhibition is to be held in September.

THE *Fair of the American Institute* is to open at Castle Garden, N. Y., on the 5th of October. Monday, October 4 will be appropriated for the arrangement of the contributions. Vegetables, Fruits, and Flowers, for the Horticultural Room, should be brought this day, before 12 o'clock.

HORTICULTURAL EXHIBITION.—Our Horticultural Society is to unite with the Monroe Co. Agricultural Society in an exhibition of Fruits, Vegetables, &c., on the 23d of this month—the second day of the County Ag. Fair. The Exhibition will be held in MINERVA HALL, corner of Main and St. Paul streets, Rochester. We trust there will be a large number of contributors and competitors from each Society.

THE FRUITS OF AMERICA: Containing a selection of the choicest varieties cultivated in the United States.—By C. M. Hovey. Published by Little & Brown, Boston, in 8 vo. numbers every alternate month, at $1 per number.

The first number of this beautiful new work made its appearance some time ago, and would have been noticed in the August number of the Farmer, but for our absence from home. We are well pleased, delighted with it. In style and execution, nothing ever before attempted in this country can compare with it. It contains portraits of the *Beurre d' Aremberg*, *Glout Morceau*, and *Van Mon's Leon le Clerc* pears, and the *Baldwin* apple. That of the *Leon le Clerc* alone is worth the cost of a number to any ardent lover of fine fruit. The descriptions are given with great precision and accuracy. The habits of the trees are well delineated by engravings, and the color of the wood and form of the leaf accompanies the fruit. Thus the fullest information that can be desired is given, respecting the merits and peculiarities of each variety.

There are some slight defects observable, we think, in the coloring. These are, we presume, inseperable from the mode in which it is executed. They are more apparent in the Baldwin apple. The color of the fruit, leaves, and wood, seems to us unnaturally light throughout.

Mr. Hovey thus points out the chief difference between the Beurre d' Aremberg and Glout Morceau pears, which varieties have for years been confounded:—"The habit of growth of the Beurre d' Aremberg is erect and regular; that of the Glout Morceau spreading and irregular. The wood of the Beurre d' Aremberg is slender, long jointed, with short roundish buds, and of a clear yellowish brown; that of the Glout Morceau stout, short jointed, with very prominent, pointed, diverging buds, and of a dark olive. The leaves of the former are narrowly folded, with scarcely any serrature; those of the latter, broad, wavy, and deeply serrated." These, it will be seen, are prominent and important distinctions.

We have hardly a doubt but that, now, when such a spirit of inquiry is abroad throughout the whole country on the subject of fruits, this splendid work will receive sufficient patronage to amply remunerate its enterprising author. The price may be called high, but it is not—only 25 cents for a full and accurate description and elegant colored portrait of a fine fruit—*one dollar* for four, and $6 for a book containing 24. It is *cheap*. Number two will be out in August, and will, we understand, contain the "Northern Spy." We shall be mistaken if a good many copies are not sold in *Western New York*. D. M. Dewey, No. 1 Arcade Hall, Rochester, is the agent.

The Paradise Apple Stock.

Mr. Barry—*Sir*:—In the July number of the Genesee Farmer you speak of apples being grafted or budded on a *Paradise stock*. Will you please explain more fully what a Paradise stock is, and if there is more than one kind of paradise stock? My object of inquiry is, that I may understand this matter, as I desire to try some experiments in grafting, budding, &c.

Yours with respect,

Leonardsville, July, 1847. G. W. Hinkley, P. M.

There is but one species of apple called the *Paradise*. It reproduces itself from seed. The fruit is small and slightly acid. It is the kind chiefly used for dwarfing the apple, but there is another kind called by the French *Doucain*, of larger growth and *sweet* fruit, (which also reproduces itself from seed,) that is much used for stocks. The trees grafted or budded on this attain a larger size than those on the Paradise.—The two species are frequently confounded by cultivators, but as both answer the purpose it is of little importance.—Ed.

To trim fruit trees excessively, is to consume their lungs, and destroy the vitality of the whole organized system.

Acknowledgments.

We are indebted to Mr. Lincoln Fay, of Portland, Chautauque county, N. Y., for specimens of "Fay's Seedling" and "Summer Bergamot" pears, and "William's Favorite," apple, all in eating August 10th. Mr. Fay is an extensive and skillful orchardist. He is now and has been for many years engaged in making a collection of the best market varieties of the apple, pear, peach, &c. He informs us that he has succeeded in raising a nutmeg peach superior to the "White Nutmeg," and full as early.

The seedling pear is a handsome, medium sized fruit; in form somewhat similar to the "English Jargonelle," of a pale lemon yellow, one side tinged with red. Judging from the specimens before us, which may have been picked too soon; it is in quality barely second rate. It is sweet and buttery, but rather deficient in juice, and inclined to an unpleasant toughness. It is a safe rule to act upon in dealing with new fruits, and one that we wish to see rigidly adhered to, not to admit or recommend any to general cultivation, that do not possess some positive superiority to any other. This seedling of Mr. Fay's we do not consider equal to *Madelaine*, *Bloodgood*, *Osband's Summer*, or *Dearborn's Seedling*.

—To Benjamin Hodge, Esq., of the Buffalo Nursery, for a copy of his Descriptive Catalogue of Fruit and Ornamental Trees, &c., for 1847 & 1848. It is a handsome pamphlet of 60 pages, containing lists of upwards of 160 varieties of apple, 120 of pear, 50 of plum, 40 of cherry, and so on, through both fruit and ornamental department—showing a *great variety*. It contains remarks on transplanting, with brief notes on the character of fruits and trees, and is embellished with figures of the Black Tartarian cherry, Fastolff Raspberry, Swainstone Seedling Strawberry, and Bartlett Pear.

On our journey westward we made a hasty visit to Mr. Hodge's establishment. It was just in "cherry time," and we had the pleasure of seeing and tasting a great number of the finest varieties. We saw also that his nursery was in good condition. He has now one of the finest lots of seedling pears and other stocks that we have seen this season. We regretted that Mr. H. was absent.

The Peach Season has now fairly commenced—the last two or three golden days having transferred their glories to the veins of the blushing and ripening fruit, which now palpitates to its very heart with the richness of its existence. At the landing, in the market, at the stands, in the streets, on the table every where, there is nothing but peaches, peaches! And yet the blessing is so welcome, so piquant, so fragrant, that millions of them would not create a monotony.—*Phil. American, Aug*, 12.

Good Advice.—The Editor of the Tribune, who has rambled extensively through the Far Western States, closes one of his interesting letters with advice which every young farmer, who has only his hands to rely on, should lose no time in taking:

"O ye who dwell in the gorges and on the slopes of granite hills! who are often inclined to murmur at the hardship of your lot in being compelled to do a fortnight's hard labor in wrestling twenty bushels of corn from the acre of niggard and stony soil, while in fertile Illinois less labor produces a hundred bushels—you have not yet learned to thank Heaven as you ought for that hard granite soil—for the glorious woods which so readily cover it, and the blessed crystal waters which gush from its flinty bosom! If you own a farm there, keep it, and by cheerful labor, guided by productive Science, render it each year more fruitful than the last; but if you have no land, and a young family forbids the hope of earning any at the East, strike boldly for the West at once, get hold of 80 or 160 acres, as well located for health or timber as you can find, and resolve, in spite of all obstacles, to make it the foundation of a competence for yourself and an outfit for your children."

Protection of Fruit Trees against late Frosts.

Wherever we have been in the Western States—in Ohio, Michigan, Illinois, and Wisconsin—we have listened to very general complaints about the fruit crops being so often destroyed by late spring frosts. It is the *great difficulty* there. B. Hubbard, Esq., of Detroit, says, in the August number of the Cultivator, that this calamity occurs in Michigan about once in every four years. In a large portion of this State the same difficulty is encountered, but not so frequently nor so fatally as in the west. The following article from the July number of the Horticulturist presents a remedy that we have before heard of being resorted to, on a small scale, with entire success. It strikes us now more favorably than ever, and we recommend a trial of it to the fruit grower of every section visited by late spring frosts:

One of the most vexatious impediments to the successful cultivation of fruit that the cultivator has to contend against in many districts of our country, is the liability to partial or complete ruin to the blossoms or young fruit by the late spring frost. This disaster may be prevented by smoke, as is known to many; but the ease and safety of the application is not appreciated as it should be; and to call attention to it is the object of this communication. In the winter or spring previous to the season of fruit blossoms, I procure a wagon load of sawdust or refuse tan bark from the tannery, a part of which I place under cover that it may become dry, and the rest I leave exposed to the weather. At the season of exposure, if the weather gives indications of danger, and the temperature is nearly or quite down to the freezing point, at one or two o'clock in the morning, I take two or three shovelfuls of the dry bark or sawdust, and lay it on the ground; into this I put a coal of fire; then, on this place half a bushel or more of the wet bark or sawdust, and a smoke will quickly rise that will prevent the accumulation of frost for some distance around. Two men will make twenty or thirty of these fires in nearly as many minutes, which will be sufficient to protect a fruit garden of an acre in extent. If there is a slight current of air, I place the fires on the windward side of the garden, if not, they are so arranged as to give security to those trees which have blossomed most fully. At the season when fruit trees are in flower, frost rarely condenses on vegetation until late in the night, and if the fires are going by two o'clock in the morning, it will be soon enough, and more fuel will not be needed, as it would be, should they be set at an earlier part of the night.

Smoke, however annoying and vexatious under certain circumstances, may be turned to good account in the matter referred to. Artificial means are often resorted to, to retard the blossoming of fruit trees until a late period in the season, in order that the danger from the frost may be lessened. The latter method affords but partial safety at certain and considerable expense, which is worse than lost should no frost occur; because as much time as the flowers are kept back, the fruit will be delayed in ripening, and many of the best varieties cannot, in northern latitudes, mature, unless they have every day of the short summer. Smoke, of course, would be much more available in the fruit garden than in the orchard. But even in the latter, one hundredth part of the loss occasioned by a severe late frost would be more than sufficient to defray all the expenses of protection by warm vapor or smoke in the way I have pointed out, and which I have thoroughly tested here.

Remember that *Labor* is necessary to excellence. This is an eternal truth, although vanity cannot be brought to believe, or indolence to heed it.—*John Randolph.*

The Annual Exhibition of the Columbus (O.) Hort. Society is to be held on 7th and 8th Sept.

Experiment in Budding.

Mr. Editor:—Allow me to say a few words on the subject of an experiment in budding, in which I am now engaged. Last summer I neglected budding till late, and consequently many of my buds failed. In order to be on the safe side this year, I commenced the operation early in July, (5th,) and found I succeeded much better. Having removed the bandage from my trees, one of them, in which I had set three buds, was broken off by the wind, just above the upper bud, (in consequence of the cross cut and the indentation caused by the tightness of the bandage.) Having watched the tree for a few days, I perceived that the buds began to swell, and in about a week they opened and put forth leaves. This induced me to try the experiment on others, and now I have a dozen or more, enough to test the value of the discovery, (accidental like most others,) of peach, plum, apricot, and nectarine, that have commenced growing. (The peach and the nectarine start more readily than the plum and the apricot.) There may be one objection to the starting of a bud on the same year that it is set, arising from the fact, that the greater portion of the growing season is past. Hence the new bud, being limited in the time of its first season's growth, may not become sufficiently united to the stock, or its wood not sufficiently hardened, to enable it to endure the severities of the coming winter.

In my experiments on this subject, I have not, at first, cut close to the bud when I have removed the top; and besides, I have generally managed so as to allow some half dozen leaves, (more or less,) to remain on the stem. I also watered freely during the drouth.

Note.—It may be thought that my practice in the above experiments is at variance with my theory of summer pruning as I have given it in some of my former communications. In answer, I reply, 1st. That subsequent experiments have satisfied me, that young trees will bear a much closer summer pruning without apparent injury than I had supposed, and closer, I believe, than older ones will bear. 2d. That my former objections were rather against the practice of keeping trees with a small head, or top, closely trimmed of all their young shoots, than against an occasional removal of them. And in addition to the reasons I then gave, I might also add, that if all lateral shoots or branches be kept off the body of the tree, it will not acquire sufficient strength to sustain the top. H.

Fairport, Aug., 1847.

Human Knowledge is a proud pillar, but it is built in the midst of a desert of ignorance, and those who have ascended the highest, have gained a more extended view of the *waste.*

Several articles deferred till next month.

LADIES' DEPARTMENT.

Cheese Making.

Mr. Editor:—Having just read an article on Cheese Making in your valuable journal, I take the liberty to make a few remarks upon that subject, having been an experienced practical English dairy-woman for 20 years. Since my residence in this country, I have often observed the difference of management in making cheese and butter—likewise in preparing rennet, and have, without egotism, always considered the English mode the plainest, safest, and best. Shall I intrude by making a few observations?

The rennet I used was prepared by myself.—Having washed most thoroughly the stomach of the calf in nine or ten pails of spring water, I used to fill it with salt and lay it in a jar with a thick layer of salt at the bottom, covering it also with a thick layer, and closing the jar at the top with brown paper doubled, until the next spring, at which time I filled the jar with strong brine, and in a day or two made use of the rennet, which was sweet and good, besides being very strong. As we kept a large dairy I had generally three or four rennets in one jar. A very small quantity of this strong rennet would answer the purpose, viz: one tea-cup full for four pails of milk; the milk to be heated blood-warm, and the rennet applied briskly and in a circular manner around the cheese-tub; the coloring, formed of anatto, rubbed upon a piece of broken ware in a bowl of warm milk, and completely mixed with the rennet in the tub; within 20 minutes the curd will be fit to break, which must be done with both hands in a complete manner, and then left to settle. In three quarters of an hour the whey may be poured gently away through a range into another tub, and then pressed well with the hands, and even cut with a knife, and removed from side to side to extract every drop of the whey as much as possible. Then leave it a quarter of an hour to settle into firm curd; after which it may be broken very small into the vat, piled up in a conical form with the cheese-cloth tightly closed in at the sides. It will now be time to place it in the press, (a heavy one,) and in an hour's time take it out, turn it, and having well rinsed out the cheese-cloth in cold water, the cheese may be replaced. At 4 o'clock in the afternoon it must be taken out again, and a dry cheese-cloth exchanged for the wet one; replace it in the press, and the next morning having taken off the cheese-cloth, salt the vat at the bottom and rub a little into the cheese at the top and sides, (*if well closed*,) replacing it without *any* cloth; turn again and salt the same at 4 o'clock P. M., also the next day, and if a thick cheese, *the day after*. It is convenient to have two presses; and the brine which runs from what I call the dry press, will be useful to keep fresh for rennet in the autumn. Thick cheese should always remain *three days in the dry press*, salted twice a day. There would not be any occasion of binding fillets around them if this was attended to, besides making the rind very hard.

When taken out of the press the cheese should be turned every day upon the shelf and washed in whey, in a fortnight or three week's time.—The English plan is to soak the cheese about 10 minutes, and then scrape the rind upon a table, wiping it very dry, and replacing it on the shelf with a dock leaf or two spread upon the top; and if changed every other day it will soon be coated with a beautiful bloom, and there would be no occasion of rubbing butter on the outside; for if *well made*, cheese will not crack open—will bear transportation to England *well*, and keep for 2 years. Butter also would be much better transported in small barrels, with first a layer of butter, then of salt alternately. The brine would keep it good, if, when placed and pressed down in the barrel, it had been properly made and the butter-milk well washed out.

Dairy work requires a great deal of care, cleanliness, and time, without which it does not answer, and the trouble and fatigue are completely lost—and the dairy, which would by vigilant attention prove such a constant source of pleasure to the farmer's wife, becomes a source of remorse, disappointment, and continual mortification. Dairies in England are always paved with stone or brick, and in warm weather *kept constantly wet*, so that they are equal (when underground, as our own Wiltshire dairy-house was built,) to the spring houses in Ohio and Pennsylvania; the milk likewise being kept in large leaden coolers, preserved the cream, and rendered it very thick and good.

With a thousand apologies for occupying so much space in your highly interesting journal, I remain, sir, with great respect,

Your much obliged friend, S. L.

Ogden, N. Y., July, 1847.

The writer of the above is entitled to our thanks for her valuable communication.

Recipe for making Yeast.—To two middling sized potatoes add a pint of boiling water, and two table spoonfuls of brown sugar. One pint of hot water should be applied to every half pint of the compound. Hot water is better in warm weather. The yeast being made without flour, will keep longer in hot weather, and is said to be much better than any in previous use. Try it.—*Maine Farmer.*

Baked Fish.—Cod, bass, and shad, are good for baking. Stuff them with a seasoning made of bread crumbs or crackers, butter, salt, pepper, and, if you like, spices. Put the fish in a bake-pan, with a tea-cup of water, and a bit of butter, and bake from forty-five to sixty minutes.

SHEEP AND WOOL IN WYOMING COUNTY.—A late number of the Western New-Yorker, published at Warsaw, says:—"The whole number of sheep in our county two years since was about *one hundred and ninety-three thousand six hundred and four.* The amount is now probably 10 per cent. more. The town of Middlebury then had 21,560; Perry 19,784; Covington 15,988; Attica 15,777; Pike 18,538; Warsaw 15,735; &c. All the remaining towns a less number. The whole number of yards of woollen goods made at the different factories is set down at 65,518; value of manufactured articles $51,358; value of raw material used $23,880. The factory of Utter, Day & Co., located in this town, manufactured nearly 26,000 yds. of cloth, and used about $9,000 worth of raw material.—Our markets for wool have been many this season. Attica, Wyoming, Warsaw, Gainsville, Pike, Perry, &c.; besides much of the wool, in the eastern part of the county has found a market at Geneseo; and north of us some have sold to buyers from Elba, Genesee county. There has been at the lowest estimate, (and it probably exceeds this,) 500,000 lbs. of wool sold this season by the farmers of our county. Admitting the sales to average 28 cents per lb. which will not vary much, if any, from that, the amount of money paid out for wool will be *one hundred and forty thousand dollars.* A nice little sum to be scattered broadcast over our county."

A NEW MODE OF PREPARING CREAM FOR CHURNING.—When cream is being collected for churning, as soon as the first skimming is put into the vessel, add at the rate of half a pint of vinegar to each gallon of cream. Suppose you churn six gallons at a time, and collect only one gallon per day, put six half pints of vinegar in the vessel, at once, to the first day's cream, and so in proportion to any other quantity. Let all the vinegar for the whole churning be added to the first collected cream. I had this from a friend who supplies a large quantity of butter of the best quality to one of the crack shops at the west end. —*Gardeners' Cronicale.*

MINCE PIES.—Boil a beef heart gently in water till very tender; then take it out, and chop it very fine; add to it enough common molasses to moisten it; plenty of spice, cinnamon, nutmeg, allspice and cloves. Put it in a stone pot, and keep it in a cold place. It will keep all winter, and make richer pies than when first prepared. Other pieces of beef will do instead.

TO CURE WARTS OR CORNS.—Take the yolk of an egg, thicken it with fine salt, which apply as a poultice at night, leaving it off in the morning. Thus continue for two or three nights, until the part affected bears a whitish appearance, then leave it off entirely, and the wart or corn, it is said, will come out, *root and branch.*

MARKET INTELLIGENCE.

Rochester Produce Market—Wholesale.

Wheat,	$1 06	1 09		Pork, bbl. mess	15 00	
Corn,	50	53		Pork, cwt.,	4 50	5 00
Barley,	44			Beef, cwt.,	3 00	4 00
Oats,	31	33		Lard, lb.,	9	10
Flour,	5 25			Butter, lb.,	12	14
Beans,	75	87		Cheese, lb.,	5½	6
Apples, bush.	12	37		Eggs, doz,	8	
Potatoes,	31	37		Poultry,	6	
Clover Seed,	4 50			Tallow,	9	
Timothy,	1 50	2 00		Maple Sugar,	—	
Hay, ton,	8 00	10 00		Lamb Skins,	25	31
Wood, cord,	2 00	3 00		Green Hides, lb	4	
Salt, bbl,	1 19			Dry "	7	8
Hams, lb,	8	10		Calf Skins,	9	

Rochester, Aug. 28, 1847.

New York Market.

[*By Magnetic Telegraph.*]

NEW YORK, August 27—7 P. M.

FLOUR AND MEAL—The demand has been good—the market steady. Fresh Genesee is selling at $5 75 a 5 87½: Oswego 5 69, according to brand. Mich. $5 50 a 5 62½. Round hoop in less demand, steady at $5 50 a 5 87½. Receipts about 1200 bbls. Sales are 6 to 6500, including 3000 Oswego at $5 62½; 2300 Genesee at 5 75; 800 bbls sour flour at 4 37 a 4 56. Meal steady at $2 62½ a 2 87½. Rye flour 4 a 4 25.

GRAIN—Inquiry continues good for wheat. Quotations steady. Sales 2000 bu. Genesee at $1 30; good do mixed Ohio at 1 20; 4000 do fair red western at 1 15, and 4000 do inferior at 1 05 a 1 07, all for milling. Corn not very active, but the tendency of the market is upward. Sales 25,000 at 73 a 74 for mixed. 75 a 76 for nearly yellow and flat yellow. and 77c for round yellow. Rye—demand good. Sales 7 or 8000 bu at 80c, for new to arrive, and 92 a 93c for old on the spot.

A small sale of barley at 56c. Oats are lower, New Northern 48 a 50. Old 53 a 55. Sales 1600 bls mess beef for government purposes, about $13. 500 bls good lard 10½ a 10¾—400 packages Ohio butter 11½ a 13c. Pork heavy. English Linseed Oil sold at 65c. 50 bls clover 7¾. timothy 16 a 18.—Flax seed 1 40½. 5000 lbs Ginseng 32 a 33. 4000 lbs beeswax 24c. 2500 bls Whiskey 28¾ a 28½. Market dull. Sugar ⅛ to ¼ of a cent lower, on low grades, and ⅛c on sugar grades.—Low qualities of molasses 2c cheaper. Higher grades steady. Coffee steady. Sterling firm, 6¾ a 7. Freights 1s6d and 7d to Liverpool.

ASHES—Market is steady; $5, 5 25 for pots.

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